The girth control pill

Tepanil® Ten-tab
(continuous release form)

(diethylpropion hydrochloride)

works on the appetite not on the 'nerves'

When girth gets out of control, TEPANIL can provide sound support for the weight control program you recommend. TEPANIL reduces the appetite—patients enjoy food but eat less. Weight loss is significant—gradual—yet there is a relatively low incidence of CNS stimulation.

Contraindications: Concurrently with MAO inhibitors, in patients hypersensitive to this drug; in emotionally unstable patients susceptible to drug abuse.

Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause *CNS effects* such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. *Sympathomimetic cardiovascular effects* reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. *Allergic phenomena* reported include such conditions as rash, urticaria, ecchymosis, and erythema. *Gastrointestinal effects* such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab tablets: One 75 mg. tablet daily, swallowed whole, in midmorning (10 a.m.); TEPANIL: One 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given in midevening to overcome night hunger. Use in children under 12 years of age is not recommended.

T-006A / 1/70 / U.S. PATENT NO. 3,001,910

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON-MERRELL INC.
PHILADELPHIA, PENNSYLVANIA 19144

LACTINEX®

TABLETS & GRANULES

■ to help restore and stabilize the intestinal flora

■ for fever blisters and canker sores of herpetic origin

Lactinex contains both *Lactobacillus acidophilus* and *L. bulgaricus* in a standardized viable culture, with the naturally occurring metabolic products produced by these organisms.

Lactinex has been shown to be useful in the treatment of gastrointestinal disturbances, and for relieving the painful oral lesions of fever blisters and canker sores of herpetic origin.[1,2,3,4,5,6,7,8]

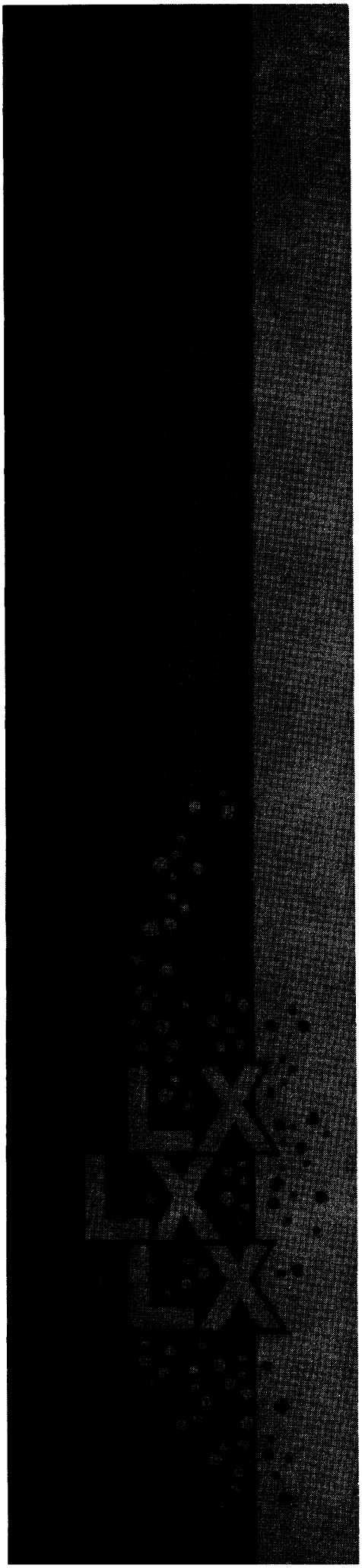
No untoward side effects have been reported to date.

Literature on indications and dosage available on request.

HYNSON, WESTCOTT & DUNNING, INC.

Baltimore, Maryland 21201

(LX-05)



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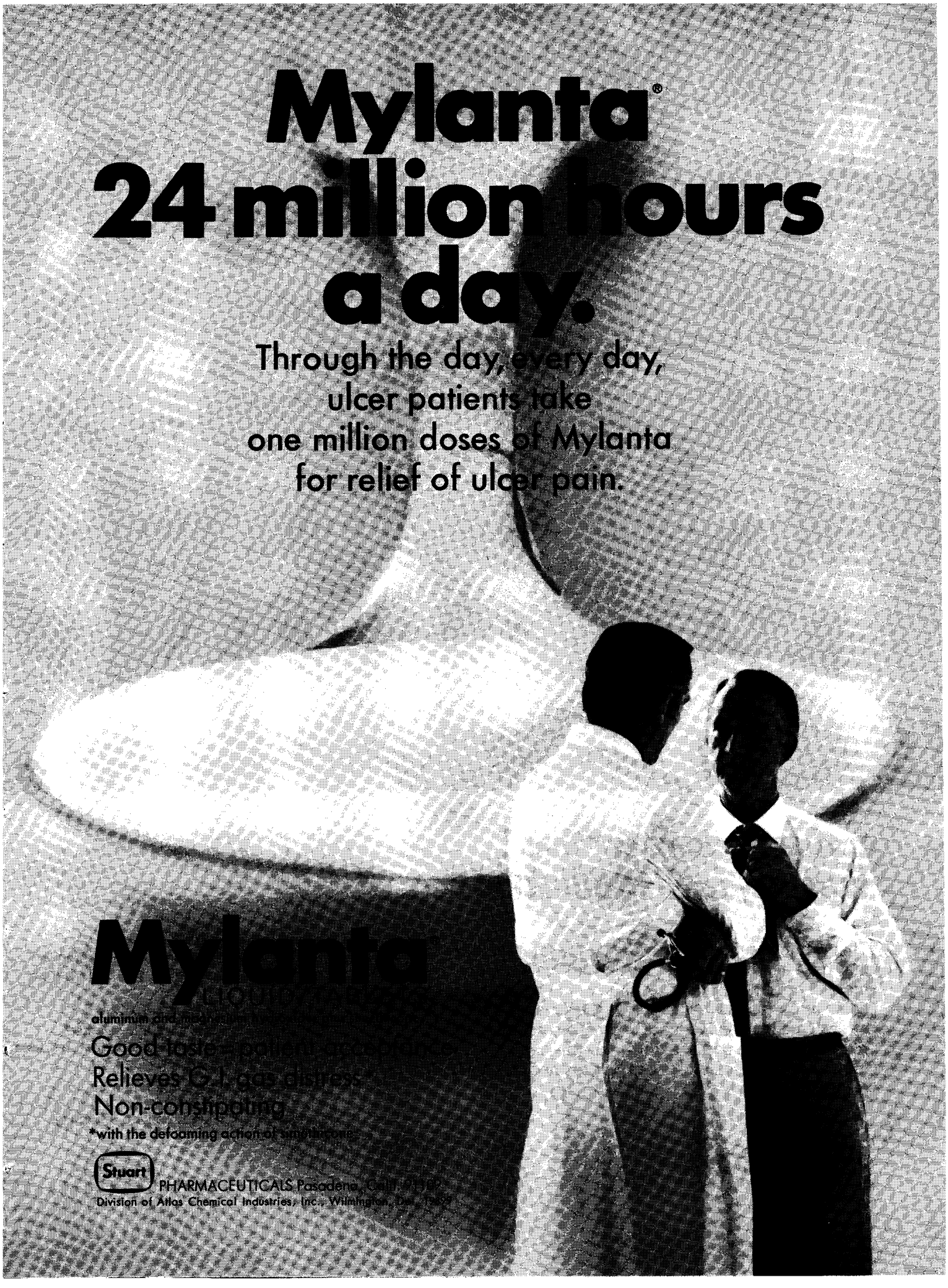
(1) Siver, R. H.: CMD, *21*:109, September 1954. (2) Frykman, H. H.: Minn. Med., *38*:19-27, January 1955. (3) McGivney, J.: Tex. State Jour. Med., *51*:16-18, January 1955. (4) Quehl, T. M.: Jour. of Florida Acad. Gen. Prac., *15*:15-16, October 1965. (5) Weekes, D. J.: N.Y. State Jour. Med., *58*:2672-2673, August 1958. (6) Weekes, D. J.: EENT Digest, *25*:47-59, December 1963. (7) Abbott, P. L.: Jour. Oral Surg., Anes., & Hosp. Dental Serv., 310-312, July 1961. (8) Rapoport, L. and Levine, W. I.: Oral Surg., Oral Med. & Oral Path., *20*:591-593, November 1965.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24 million hours
a day.
Through the day, every day,
ulcer patients take
one million doses of Mylanta
for relief of ulcer pain.
Mylanta
Good taste
Relieves G.I. gas distress
Non-constipating
Stuart
PHARMACEUTICALS

If they remember "then"... they may need Mediatric® now.

Their world has made history—and they're afraid they may have too. They are the "getting old" patients who may not be quite sick, nor yet quite well. They probably complain of too easy fatigue, of vague aches and pains often without any evidence of organic disease. You know it's an inexorable part of aging—and only an improvement in symptoms can be expected. MEDIATRIC is designed to help...

The need for metabolic support...
MEDIATRIC provides the gonadal steroids [PREMARIN® (conjugated estrogens-equine), orally active, natural estrogens, and methyltestosterone] for physiologic and metabolic benefits.

The need for mood elevation...
MEDIATRIC *provides methamphetamine* to impart a gentle emotional uplift and combat apathy.

The need for nutritional support...
MEDIATRIC provides specially selected nutritional supplements to help meet the dietary requirements of the elderly individual.

The need for dosage convenience...
Only a single Tablet or Capsule (or 3 teaspoonfuls of Liquid) daily to minimize skipped doses.

	Each MEDIATRIC® Tablet or Capsule contains:	Each 15 cc. (3 teaspoonfuls) of MEDIATRIC® Liquid† contains:
Conjugated estrogens-equine (PREMARIN®)	0.25 mg.	0.25 mg.
Methyltestosterone	2.5 mg.	2.5 mg.
Methamphetamine HCl	1.0 mg.	1.0 mg.
Cyanocobalamin	2.5 mcg.	1.5 mcg.
Thiamine HCl	—	5.0 mg.
Thiamine mononitrate	10.0 mg.	—
Riboflavin	5.0 mg.	—
Niacinamide	50.0 mg.	—
Pyridoxine HCl	3.0 mg.	—
Calcium pantothenate	20.0 mg.	—
Ferrous sulfate exsic.	30.0 mg.	—
Ascorbic acid	100.0 mg.	—

†Contains 15% alcohol—some loss unavoidable.

Mediatric® tablets, capsules, liquid,
Steroid-nutritional compound
may help a little, or a lot.

BRIEF SUMMARY

Indication: For use in aging patients of both sexes.
Contraindication: Carcinoma of the prostate, due to methyltestosterone component.
Side Effects: In addition to withdrawal bleeding, breast tenderness or hirsutism may occur.
Suggested Dosage: *Male and female*—1 Tablet or Capsule or 3 teaspoonfuls Liquid, daily or as required.
In the female: To avoid continuous stimulation of breast and uterus, cyclic therapy is recommended (3 week regimen with 1 week rest period—Withdrawal bleeding may occur during this 1 week rest period).
In the male: A careful check should be made on the status of the prostate gland when therapy is given for protracted intervals.
Supplied: No. 752—MEDIATRIC Tablets, in bottles of 100 and 1,000. No. 252—MEDIATRIC Capsules, in bottles of 30, 100, and 1,000. No. 910—MEDIATRIC Liquid, in bottles of 16 fluidounces.

Ayerst® AYERST LABORATORIES
New York, N.Y. 10017

6952

new 10% solution...
particularly convenient for home use

MUCOMYST®-10
(ACETYLCYSTEINE)

liquefies thick, viscid mucus in chronic bronchitis and emphysema

Mucomyst, as 20% acetylcysteine, has been used with safety and effectiveness in hospitals for over five years.

Now a new 10% solution, Mucomyst-10, offers you the choice of prescribing a lesser concentration whenever you feel this is desirable. It provides added convenience and simplicity, particularly for your patients using nebulizing units at home.

By including Mucomyst-10 in the home management regimen, you can provide full mucolytic benefits for many of your patients with chronic bronchitis and emphysema complicated by tenacious secretions.

Indications: Mucomyst has been demonstrated to be clinically effective as adjuvant therapy in a wide range of conditions in which thick, viscous mucus is a problem, including: postoperative atelectasis and pneumonia; chronic bronchopulmonary disease (emphysema, chronic bronchitis, asthma, and bronchiectasis); acute bronchopulmonary disease (pneumonia, bronchitis, and tracheobronchitis); tracheostomy care; facilitation of bronchial studies; maintenance of an open airway during anesthesia; and to help control pulmonary complications of cystic fibrosis. **Contraindications:** Mucomyst is contraindicated in those patients who are sensitive or who have developed a sensitivity to it. **Warnings: After proper administration of acetylcysteine, an increased volume of liquefied bronchial secretions may occur. When cough is inadequate, the open airway must be maintained by mechanical suction if necessary. When there is a large mechanical block due to foreign body or local accumulation, the airway should be cleared by endotracheal aspiration, with or without bronchoscopy. Asthmatics under treatment with Mucomyst should be watched carefully. If bronchospasm progresses, this medication should be immediately discontinued. Adverse Effects:** Adverse effects have included stomatitis, nausea and rhinorrhea. Sensitivity and sensitization to Mucomyst have been reported very rarely. A few susceptible patients, particularly asthmatics (see **Warnings**), may experience varying degrees of bronchospasm associated with the administration of nebulized acetylcysteine. Most patients with bronchospasm are quickly relieved by the use of a bronchodilator given by nebulization. **Administration & Dosage:** Mucomyst may be administered by nebulization into a tent, Croupette, face mask, or mouthpiece; or by direct instillation. **Mucomyst should not be placed directly into the chamber of a heated (hot-pot) nebulizer.** Complete details on dosage, administration, and compatibility are included in the package insert. Additional information may be obtained from Mead Johnson Laboratories. **Supplied: Mucomyst-10 (acetylcysteine)**, a sterile 10% solution, in vials of 10 ml. and 30 ml.; **Mucomyst (acetylcysteine)**, a sterile 20% solution, in vials of 10 ml. and 30 ml.

Mead Johnson
LABORATORIES

 70469

Obesity Oddities

when relief
means so much
in keeping
your G.U.
patient comfortable

URISED®

CONAL PHARMACEUTICALS INC

Clinically effective for G.U. Therapy[1-5]

There are not many drug combinations in use today which can claim to have served the medical profession for more than 50 years. Such a record reflects the continued confidence of physicians in URISED. This is not a dramatic "wonder drug"—but a *useful* one.

It fills a need in urologic and general practice—a need for a mild but reliable agent with a very low order of toxicity. It can be used alone to treat mild and uncomplicated urinary infections. It can be used as "interim therapy" while awaiting the results of urine culture. It can be used as an adjunct (to relieve pain and spasm) with almost any other form of antibacterial therapy.

The characteristic blue/green urine tells the patient that something is happening. The patient generally tells *you* that symptomatic relief follows the first dose.

REFERENCES: (1) Sands, R.X.: New York St. J. Med. 61:2598-2602, 1961; (2) Renner, M.J., et al.: Hosp. Topics 39:71-73, 1961; (3) Haas, Jr., J., and Kay, L. L.: Southwest Med. 42:30-32,1961; (4) Marshall, W.: Clin. Med. 7:499-502, 1960; (5) Strauss B.: Clin. Med. 4:307-310, 1957.

URISED®

Each Blue-Coated Tablet contains Active:

Atropine Sulfate	0.03 mg.	Methylene Blue . .	5.4 mg.
Hyoscyamine . .	0.03 mg.	Phenyl Salicylate	18.1 mg.
Methenamine . .	40.8 mg.	Benzoic Acid . . .	4.5 mg.

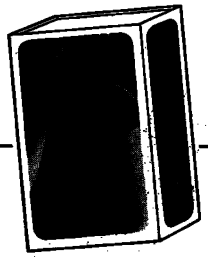
PRECAUTIONS: Administer with caution to persons with atropine idiosyncrasy or cardiac disease.

SIDE EFFECTS: Neither irritation nor untoward reactions have been reported; however, if pronounced dryness of the mouth, flushing, or difficulty in initiating micturition occur, decrease dosage. If rapid pulse, dizziness or blurring of vision occur, discontinue use immediately. Acute urinary retention may be precipitated in prostatic hypertrophy.

CONTRAINDICATIONS: Glaucoma, urinary bladder neck or pyloric obstruction, duodenal obstruction and cardiospasm. Hypersensitivity to any of the ingredients.

DOSAGE: Adults—Two tablets, orally, four times per day followed by liberal fluid intake. Acute cases—initially two tablets every hour for three doses followed by the recommended daily administration. Children—One-half the adult dose.

(Stocked Nationally Through All Service Wholesale Druggists)



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PHARMACEUTICALS, INC.
CHICAGO, ILLINOIS 60640

MANUFACTURERS OF URICEUTICAL® SPECIALTIES

ANESTACON® • CYSTOSPAZ® • MANDACON™ • URISED®
URISEDAMINE® • ŪTRASUL® Tablets and Suspension

Printed in U.S.A.

MAR. 1968

Benylin®
EXPECTORANT

Each fluidounce contains: 80 mg. Benadryl® (diphenhydramine hydrochloride), Parke-Davis; 12 grains ammonium chloride; 5 grains sodium citrate; 2 grains chloroform; 1/10 grain menthol; and 5% alcohol. An antitussive and expectorant for control of coughs due to colds or of allergic origin, BENYLIN EXPECTORANT *is the leading cough preparation of its kind.* BENYLIN EXPECTORANT *tends to inhibit cough reflex ...soothes irritated throat membranes. And its not-too-sweet, pleasant raspberry flavor makes* BENYLIN EXPECTORANT *easy to take.*

PRECAUTIONS: *Persons who have become drowsy on this or other antihistamine-containing drugs, or whose tolerance is not known, should not drive vehicles or engage in other activities requiring keen response while using this preparation. Hypnotics, sedatives, or tranquilizers if used with* BENYLIN EXPECTORANT *should be prescribed with caution because of possible additive effect. Diphenhydramine has an atropine-like action which should be considered when prescribing* BENYLIN EXPECTORANT.

ADVERSE REACTIONS: *Side reactions may affect the nervous, gastrointestinal, and cardiovascular systems. Drowsiness, dizziness, dryness of the mouth, nausea, nervousness, palpitation, and blurring of vision have been reported. Allergic reactions may occur.*

PACKAGING: *Bottles of 4 oz., 16 oz., and 1 gal.*

Parke, Davis & Company, Detroit, Michigan 48232

PARKE-DAVIS

E0669

a "sleeping pill" for huffers

and puffers

As the sales force puffs away, the boss tells them they're getting a bonus because business is better than ever. And they've earned it. Some of these guys drive themselves so hard they can't sleep nights.

By providing a good night's sleep, Doriden helps keep them in there pitching.

But Doriden isn't just for them. It's suitable for many others with insomnia—the chronically ill, the aged, hospitalized patients, those with renal dysfunction.

And guys who shouldn't puff on cigars—fellows who hack away with chronic bronchitis—or huff and puff with emphysema.

Given in recommended dosage for insomnia, Doriden does not cause respiratory depression or otherwise aggravate pulmonary disorders.

For a man with a sleeping problem, Doriden can be the best bonus of all. Even if he has a breathing problem, too.

CIBA Pharmaceutical Company, Summit, N.J.

C I B A

Doriden® (glutethimide)

INDICATIONS: For night-time, daytime, and preoperative sedation, as well as during first stage of labor.

CONTRAINDICATIONS: Known hypersensitivity to glutethimide.

WARNINGS: Caution patients about possible combined effects with alcohol and other CNS depressants. Do not operate machinery, drive motor vehicle, or engage in activities requiring complete alertness shortly after ingesting drug.

Dosage of coumarin anticoagulants may require adjustments during and on cessation of glutethimide therapy.

Physical and Psychological Dependence: Physical and psychological dependence have occurred. Prescribe cautiously for patients known to take excessive quantities of drugs. Limit repeated prescriptions without adequate medical supervision. Withdrawal symptoms include nausea, abdominal discomfort, tremors, convulsions, and delirium. Newborn infants of mothers dependent on glutethimide may also exhibit withdrawal symptoms. In the presence of dependence, dosage should be reduced gradually.

Pregnancy: Use of any drug in pregnancy or lactation requires weighing potential benefits against hazards.

PRECAUTIONS: Total daily dosage above 1 Gm is not recommended for continued administration. In presence of pain, which may counteract the sedative effect of glutethimide, an analgesic should also be prescribed.

ADVERSE REACTIONS: Withdraw glutethimide if a generalized skin rash occurs. Rash usually clears spontaneously 2 or 3 days after withdrawal. Occasionally, hemorrhagic or urticarial rash may occur. In recommended doses, there have been rare reports of nausea, hangover, paradoxical excitation, and blurring of vision. Rarely, acute hypersensitivity reactions, porphyria, and blood dyscrasias (thrombocytopenic purpura, aplastic anemia, leukopenia) have been reported.

DOSAGE: To avoid oversedation, individualize dosage. Not recommended for children under 12.

Night-time sedation: 0.25 to 0.5 Gm at bedtime. Repeat dose if necessary, but not less than 4 hours before arising.

Daytime sedation: 0.125 to 0.25 Gm t.i.d. after meals.

Preoperative sedation: 0.5 Gm the night before surgery; 0.5 to 1 Gm 1 hour before anesthesia.

First stage of labor: 0.5 Gm at onset of labor. Repeat if necessary.

SUPPLIED: *Tablets,* 0.5 Gm (white, scored); bottles of 100, 500, 1000 and Strip Dispensers of 100.

Tablets, 0.25 Gm (white, scored); bottles of 100 and 1000.

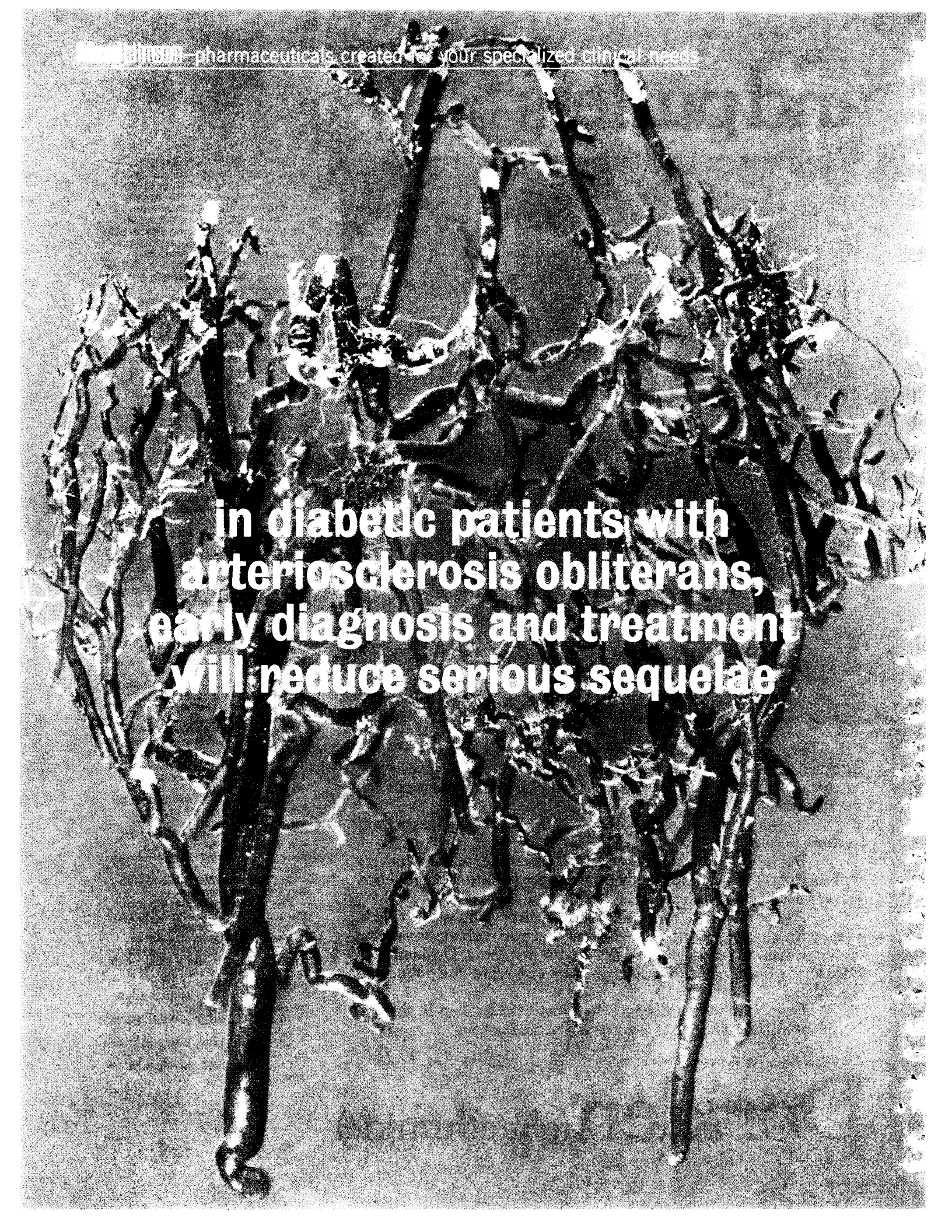
Tablets, 0.125 Gm (white); bottles of 100.

Capsules, 0.5 Gm (blue and white); bottles of 100.

Consult complete literature before prescribing.

2/4509

Johnson & Johnson—pharmaceuticals created for your specialized clinical needs



Microphoto of occluded vessels in gangrenous area of a first toe amputated because of severe arteriosclerosis obliterans. Cast was made by injecting acrylic plastic into the vessels. *Used with permission. Courtesy of Margaret C. Conrad, Ph.D., Department of Physiology, Bowman-Gray School of Medicine, Wake Forest College, Winston-Salem, N. C.*

for diabetic patients with responsive arteriosclerosis obliterans

VASODILAN®

(ISOXSUPRINE HCl)

■ acts directly to increase blood flow to deep muscle arteries[1,2]

■ does not interfere with diabetic control[3]

■ may be used safely in patients with peptic ulcer, diabetes or chronic coronary artery disease[3-5]

New 20 mg. strength now available: Vasodilan 20 mg. tablets for greater dosage simplicity and convenience. Recommended *initial* dose: one 20 mg. tablet q.i.d.

Although not all clinicians agree on the value of peripheral vasodilators,[6-8] several investigators[4,5] have reported favorably on the effects of isoxsuprine on peripheral blood flow in skeletal muscle vessels. Effects have been demonstrated both by objective measurement[1,5,9] and observation of clinical improvement.[4,10-12]

Indications: Arteriosclerosis obliterans, diabetic vascular diseases, thromboangiitis obliterans (Buerger's disease), Raynaud's disease, postphlebitic conditions, acroparesthesia, frostbite syndrome and ulcers of the extremities (arteriosclerotic, diabetic, thrombotic). **Composition:** VASODILAN tablets, isoxsuprine hydrochloride 10 mg. and 20 mg. **Dosage:** Oral—10 to 20 mg. t.i.d. or q.i.d. **Contraindications and Cautions:** There are no known contraindications to recommended oral dosage. Do not give immediately postpartum or in the presence of arterial bleeding. **Side Effects:** Occasional palpitation and dizziness can usually be controlled by dosage reduction. As intramuscular administration of 10 mg. or more may cause brief hypotension and tachycardia, single intramuscular doses exceeding this amount are not recommended. Complete details available in product brochure from Mead Johnson Laboratories. **References:** (1) Stein, I. D.: Angiology *15*:1 (April) 1964. (2) New Drugs— Evaluated by the A.M.A. Council on Drugs, Chicago, American Medical Association, 1967, pp. 295-297. (3) Samuels, S. S., and Shaftel, H. E.: J. Indiana M. A. *54*:1021-1023 (July) 1961. (4) Kaindl, F.; Pärtan, J., and Polsterer, P.: Wien. klin. Wchnschr. *68*:186-191 (March 16) 1956. (5) Kaindl, F.; Samuels, S. S.; Selman, D., and Shaftel, H.: Angiology *10*:185-192 (Aug.) 1959. (6) Myers, K. A.: Mod. Treat. *4*:370-383 (March) 1967. (7) Gillespie, J. A.: Angiology *17*:280-288 (May) 1966. (8) Smit, Arne, F., *et al.*: Nord. med. *20*:1260, 1959. (9) Samuels, S. S., and Shaftel, H. E.: J.A.M.A. *171*:142-145 (Sept. 12) 1959. (10) Frieh, Ch., and Olivier, L.: Lyon Méd. *91*:891-896 (May 24) 1959. (11) Weghaupt, Von K.: Wien. klin. Wchnschr. *69*:31-32 (Jan. 11) 1957. (12) Clarkson, I. S., and LePere, D. M.: Angiology *11*:190-192 (June) 1960.

Mead Johnson LABORATORIES

(Did he mention it when you checked his glucose tolerance?)

A few gaps in his memory...a spell of unexplained weakness...a moment of confusion now and then: The early warnings of cerebrovascular disease are often subtle, easy for the patient to dismiss.

But they are by no means uncommon.

You are most likely to detect them, of course, in the diabetic, the hypertensive, the cardiac patient...surprisingly often during the most productive years of their lives, the forties and fifties.

But it may take careful questioning, sometimes of the family as well as the patient, to detect the warnings. You can't always trust the patient to speak of them spontaneously.

It pays to be suspicious. Early diagnosis of transient ischemia means more viable vascular muscle capable of responding to the direct spasmolytic and dilating action of Cyclospasmol...a better chance to protect and maintain adequate cerebral circulation.

Cyclospasmol is particularly suited for long-term therapy: It has a smooth, gradual onset of action...chances for the desired result increase with continued use...it is notably free of adrenergic, cardiostimulant and other unwanted effects.

Before transient cerebral ischemia gives way to lasting damage

Cyclospasmol® (cyclandelate)

For long-term enhancement of cerebral blood flow

See facing page for Brief Summary

Cyclospasmol
(cyclandelate)

ACTIONS: Cyclospasmol (cyclandelate) is an orally effective peripheral spasmolytic and vasodilator that acts directly on the vascular smooth musculature to produce a gradual and progressive relaxation that enhances the peripheral and cerebral blood flow. **INDICATIONS:** For adjunctive therapy in occlusive and vasospastic diseases of the vascular system associated with an impaired circulation, such as: intermittent claudication; arteriosclerosis obliterans; thrombophlebitis (to control associated vasospasm and muscular ischemia); nocturnal leg cramps; local frostbite; Raynaud's phenomenon; as an aid to encourage healing of diabetic and trophic ulcers of the legs; and for selected cases of ischemic cerebral vascular disease. A faster response may be expected in conditions in which vasospasm is predominant in the pathological process. The drug is not intended to substitute for an adequate medical or surgical program in the treatment of peripheral or cerebral vascular disease. It is imperative that the patient continue to follow established therapy, e.g., foot care, discontinuance of smoking, etc., while taking Cyclospasmol. Since cerebrovascular disease is diagnosed most frequently only after destruction of nerve tissue, it cannot be expected that signs and symptoms arising from an interruption of neuronal function can be completely reversed by correcting the exciting cause. Nevertheless, restoration of blood flow towards more normal levels with cyclandelate may often produce marked relief from such signs and symptoms as head noises, ringing in the ears, a feeling of weakness, unsteady gait, mental confusion, temporary fluctuations in hearing acuity, poor memory and slurred speech. More important, the drug may provide prophylaxis against further circulatory embarrassment, particularly if the diminished circulation is associated with spasm of the vascular wall. **CONTRAINDICATIONS:** Cyclospasmol is contraindicated in cases of known hypersensitivity to the drug. **WARNINGS: 1.** Cyclandelate should be used with extreme caution in patients with severe obliterative coronary artery or cerebral vascular disease, since there is a possibility that these diseased areas may be compromised by vasodilatory effects of the drug elsewhere. **2. USE IN PREGNANCY:** The safety of cyclandelate for use during pregnancy or lactation has not been established; therefore, it should not be used in pregnant women or in women of childbearing age unless, in the judgment of the physician, its use is deemed absolutely essential to the welfare of the patient. **3.** Although no prolongation of bleeding time has been demonstrated in humans in therapeutic dosages, it has been demonstrated in animals at very large doses. Therefore, the hazard of a prolonged bleeding time should be carefully considered when administering cyclandelate to a patient with active bleeding or a bleeding tendency. **PRECAUTIONS:** Since Cyclospasmol is a vasodilator, it should be used with caution in patients having glaucoma. Consult direction circular before prescribing. **ADVERSE REACTIONS:** Gastrointestinal distress (pyrosis, pain and eructation) may occur with Cyclospasmol. These symptoms occur infrequently and are usually mild. Relief can often be obtained by taking the medication with meals or by the concomitant use of antacids. Mild flush, headache, feeling of weakness or tachycardia may occur, especially during the first weeks of administration. **SUPPLIED:** 200 mg. blue capsules in bottles of 100 and 500; 100 mg. orange tablets in bottles of 100 and 500.

May we send you reprints, detailed literature or professional samples?

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Ives®

Taste!

Dicarbosil®
ANTACID

Your ulcer patients and others will love it. Specify DICARBOSIL 144's—144 tablets in 12 rolls.

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A NO-LOAD FUND

Investing in stocks carefully selected for long term growth possibilities

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Doctor, after all we've been through together...

abscess
acne
amebiasis
anthrax
bacillary dysentery
bartonellosis
bronchitis
bronchopulmonary infection
brucellosis
chancroid
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endocarditis
genitourinary infections
gonorrhea
granuloma inguinale
listeriosis
lymphogranuloma
mixed bacterial infection
osteomyelitis
otitis
pertussis
pharyngitis
pneumonia
psittacosis
pyelonephritis
Rocky Mountain spotted fever
scarlet fever
septicemias
sinusitis
soft tissue infection
tonsillitis
tularemia
typhus fever
urethritis

...don't you think it's time we were on a first-name basis?

call me "Achro®V"

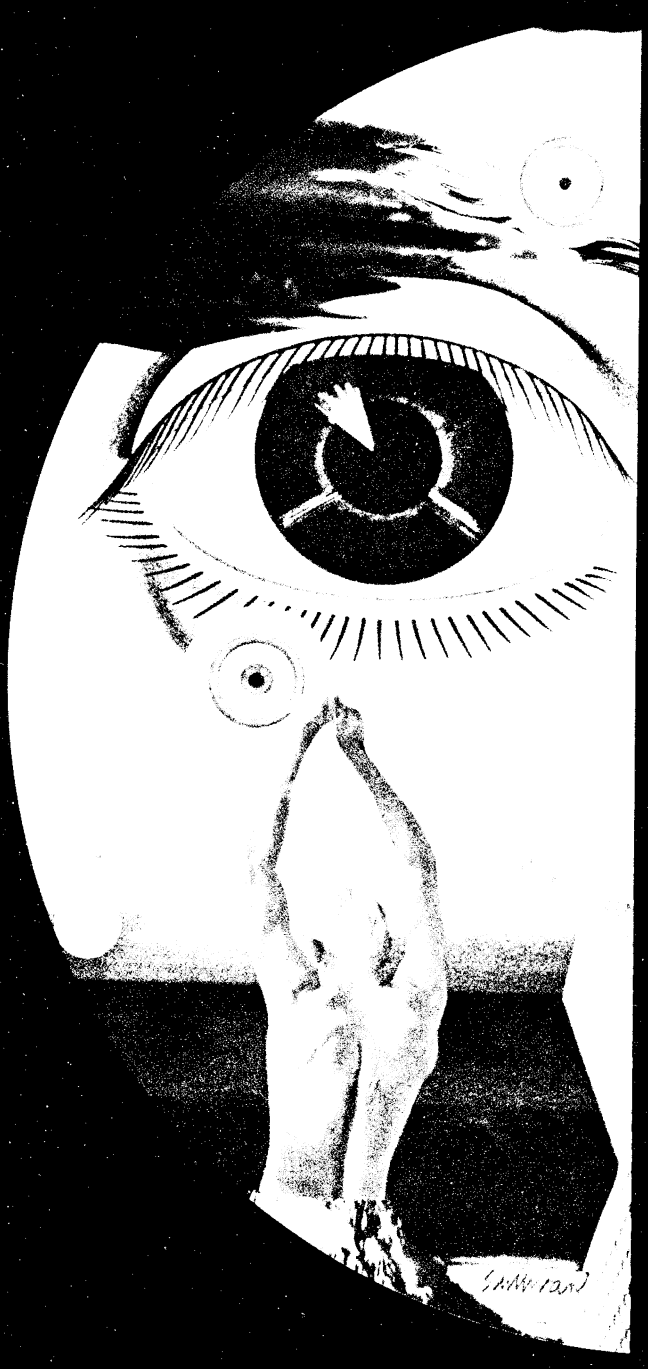
Every pharmacist knows ACHRO® V stands for ACHROMYCIN® V

Contraindications: Hypersensitivity to tetracycline.
Warnings: In renal impairment, since liver toxicity is possible, lower doses are indicated; during prolonged therapy consider serum level determinations. Photodynamic reaction to sunlight may occur in hypersensitive persons. Photosensitive individuals should avoid exposure; discontinue treatment if skin discomfort occurs.
Precautions: Nonsusceptible organisms may overgrow; treat superinfection appropriately. Tetracycline may form a stable calcium complex in bone-forming tissue and may cause dental staining during tooth development (last half of pregnancy, neonatal period, infancy, early childhood).
Adverse Reactions: *Gastrointestinal*—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. *Skin*—maculopapular and erythematous rashes; exfoliative dermatitis; photosensitivity; onycholysis, nail discoloration. *Kidney*—dose-related rise in BUN. *Hypersensitivity reactions*—urticaria, angioneurotic edema, anaphylaxis. *Intracranial*—bulging fontanels in young infants. *Teeth*—yellow-brown staining; enamel hypoplasia. *Blood*—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. *Liver*—cholestasis at high dosage. Upon adverse reaction, stop medication and treat appropriately.

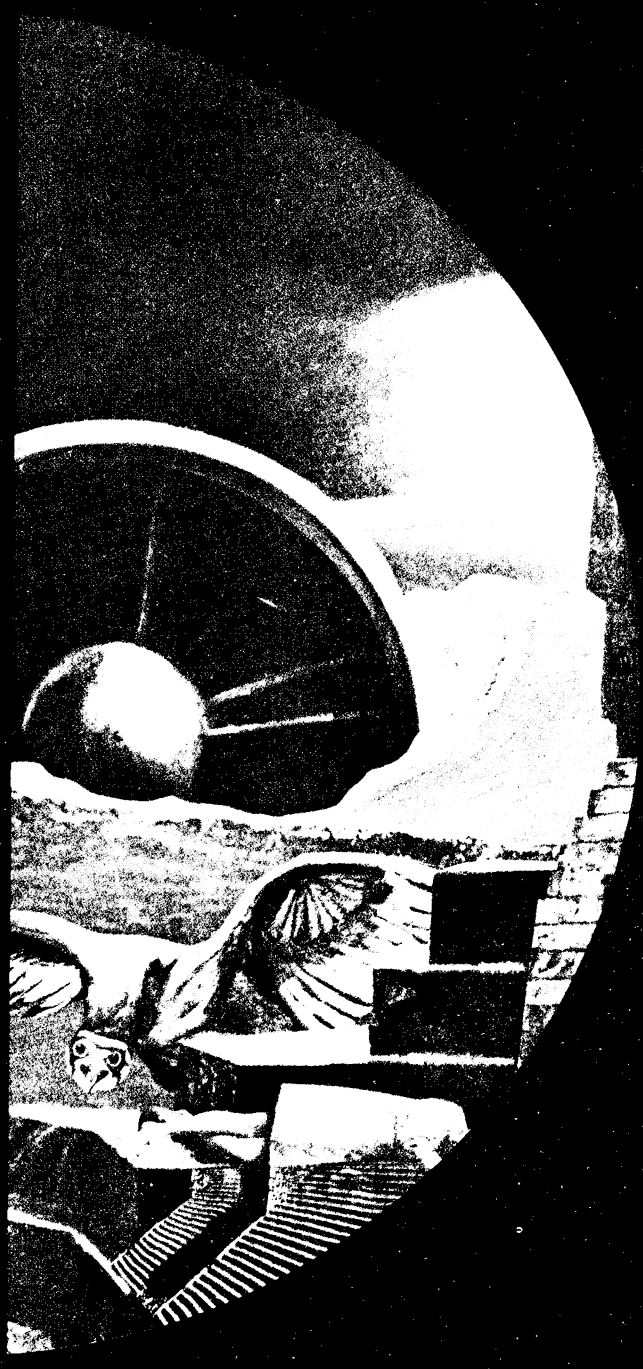
Achromycin® V
tetracycline

LEDERLE LABORATORIES • A Division of American Cyanamid Company, Pearl River, New York 10965

484-9



First, there were tranquilizers for anxiety



Then, there were antidepressants for depression

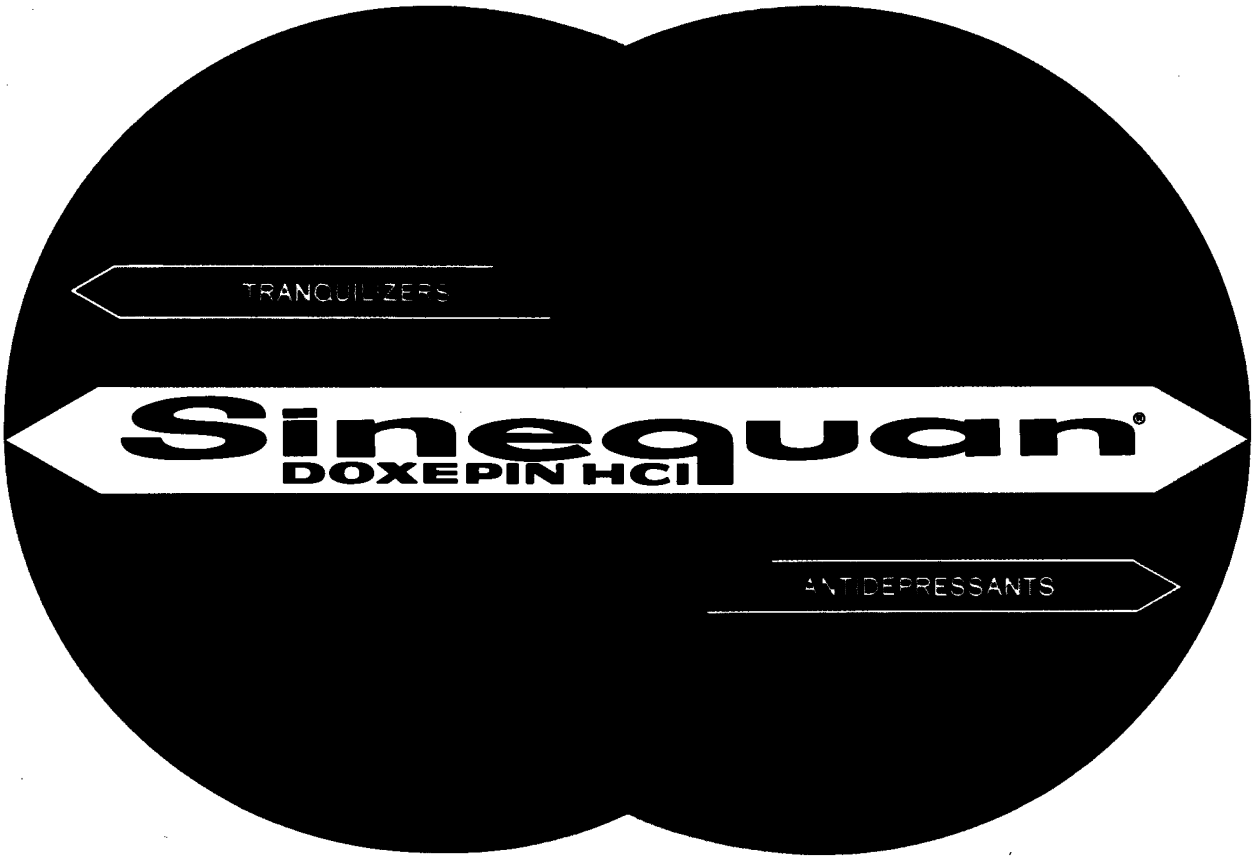
NOW, Pfizer Laboratories introduces

Sinequan®
DOXEPIN HCl

The tranquilizer that is
an antidepressant.

The antidepressant that is
a tranquilizer.

The first single agent with potent
dual action...active throughout the spectrum
of psychoneurotic anxiety/depression



New Sinequan® (doxepin HCl)... in coexisting anxiety/depression

142 patients with symptoms of both anxiety and depression were treated with Sinequan—*83% of the patients showed marked, moderate, or slight improvement.*

TARGET SYMPTOMS	TOTAL	NO. OF PATIENTS IMPROVED	IMPROVEMENT MARKED	MODERATE	SLIGHT	% OF PATIENTS IMPROVED
anxiety/ depression	142	118	39	46	33	83%

In three double-blind studies comparing Sinequan and a fixed combination (perphenazine-amitriptyline), Sinequan was found to be at least as effective as—and in some cases more effective than—the combination.

New Sinequan... in prominent anxiety

238 psychoneurotic patients in whom anxiety was the most prominent symptom were treated with Sinequan *—84% of the patients showed marked, moderate, or slight improvement.*

DIAGNOSIS	TOTAL	NO. OF PATIENTS IMPROVED	IMPROVEMENT MARKED	MODERATE	SLIGHT	% OF PATIENTS IMPROVED
psychoneurotic anxiety	238	201	92	59	50	84%

In eight double-blind studies of Sinequan and either chlordiazepoxide or diazepam, Sinequan was always found to be at least as effective as—and in some cases more effective than—the tranquilizers in relieving symptoms of anxiety.

New Sinequan... in prominent depression

259 psychoneurotic patients in whom depression was the most prominent symptom were treated with Sinequan—*81% of the patients showed marked, moderate, or slight improvement.*

DIAGNOSIS	TOTAL	NO. OF PATIENTS IMPROVED	IMPROVEMENT MARKED	MODERATE	SLIGHT	% OF PATIENTS IMPROVED
psychoneurotic depression	259	210	106	72	32	81%

In five double-blind studies of Sinequan and amitriptyline, Sinequan was always found to be at least as effective as—and in some cases more effective than—the antidepressant in relieving symptoms of depression.

Data on File, Medical Research Laboratories, Pfizer Pharmaceuticals, Chas. Pfizer & Co., Groton, Conn.

Summary of clinical experience with Sinequan (doxepin HCl) in, Pitts, N.: The Clinical Evaluation of Doxepin—A New Psychotherapeutic Agent: Psychosomatics 10:164, May-June, 1969.

Adverse reactions:

Sinequan (doxepin HCl) is usually well tolerated, even in the elderly. Those side effects which do occur are generally mild.

Most frequently observed side effects

Drowsiness has been observed, usually early in the course of therapy. It tends to disappear as therapy continues.

Anticholinergic effects (including dry mouth, blurred vision, constipation) have been reported. They are usually mild and often subside with continued therapy or reduction of dose.

Infrequently observed side effects

Extrapyramidal symptoms have been infrequent and have usually occurred at high dose levels. They tend to be mild and easily controlled.

Cardiovascular effects, such as hypotension and tachycardia, have been reported infrequently.

Other infrequently reported side effects include dizziness, nausea, increased sweating, edema, nasal congestion and weight gain.

Sinequan is noneuphoriant, and no dependence has been reported to date.

Safety:

Liver disorders, blood dyscrasias, lens opacities or pigment deposits in eyes or skin have not been reported to date with Sinequan.

Contraindications:

Sinequan is contraindicated in individuals who have shown hypersensitivity to the drug, and in patients with glaucoma or a tendency to urinary retention.

Warnings:

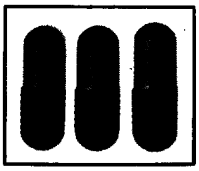
Sinequan should not be used concomitantly or within two weeks of therapy with MAO inhibitors.

Sinequan should not be used in pregnant women unless, in the judgment of the physician, it is essential for the welfare of the patient. Its use in children under 12 years of age is not recommended because safe conditions for its use have not been established.

(See last page for full adverse reactions, contraindications, warnings and precautions.)

Pfizer
LABORATORIES DIVISION
New York, N.Y. 10017

Recommended dosage:



Starting dosage—
25 mg., t.i.d.
Maximum dosage—
300 mg. per day.

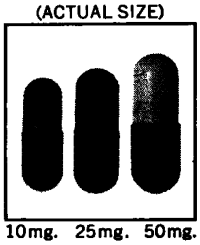
Expected activity:

Antianxiety activity is rapidly apparent, comparable to that of the benzodiazepine tranquilizers. Antidepressant activity is comparable to the tricyclic antidepressants.

How supplied:

Bottles of 100 capsules of 10 mg., 25 mg., and 50 mg.; bottles of 1000 capsules of 25 mg. and 50 mg.

(ACTUAL SIZE)



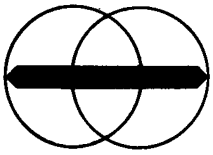
10mg. 25mg. 50mg.

NEW

Sinequan®

DOXEPIN HCl

Starting dosage:
25 mg. t.i.d.

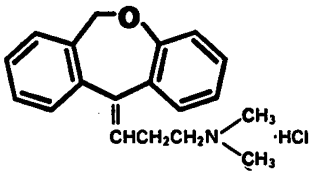


The first single agent that can be prescribed as a tranquilizer, an antidepressant...or both

SINEQUAN (Doxepin·HCl) Capsules

Description. SINEQUAN (doxepin·HCl) is a new dibenzoxepin psychotherapeutic agent with marked antianxiety and significant antidepressant activity.

Chemistry. SINEQUAN (doxepin·HCl) is a dibenzoxepin derivative and is the first of a new family of psychotherapeutic agents. Specifically, it is an isomeric mixture of N,N-Dimethyl-dibenz(b,e)oxepin-$\Delta^{11(6H)}$, γ propylamine hydrochloride.



SINEQUAN (doxepin • HCl)

Indications. In a carefully designed series of controlled studies, SINEQUAN (doxepin·HCl) has been shown to have marked antianxiety and significant antidepressant activity. SINEQUAN (doxepin·HCl) is recommended for the treatment of:

1. Patients with psychoneurotic anxiety and/or depressive reactions.
2. Mixed symptoms of anxiety and depression.
3. Alcoholic patients with anxiety and/or depression.
4. Anxiety associated with organic disease.
5. Psychotic depressive disorders including involutional depression and manic depressive reactions.

The target symptoms of psychoneurosis that respond particularly well to SINEQUAN (doxepin·HCl) include anxiety, tension, depression, somatic symptoms and concerns, insomnia, guilt, lack of energy, fear, apprehension and worry.

In those patients in whom anxiety masks the depressive state, SINEQUAN (doxepin·HCl) is of particular value since it exerts a potent antidepressant effect as well as antianxiety activity.

Patients who have failed to respond to other antianxiety or antidepressant drugs may benefit from treatment with SINEQUAN (doxepin·HCl).

Clinical experience has shown that SINEQUAN (doxepin·HCl) is safe and well tolerated even in the elderly patient.

In a large series of patients systematically observed for withdrawal symptoms, none were reported. This is consistent with the virtual absence of euphoria as a side effect and the lack of addiction potential characteristic of this type of chemical compound.

Contraindications. SINEQUAN (doxepin·HCl) is contraindicated in individuals who have shown hypersensitivity to the drug.

SINEQUAN (doxepin·HCl) is contraindicated in patients with glaucoma, or a tendency to urinary retention.

Warnings. *Usage in Pregnancy:* SINEQUAN (doxepin·HCl) has not been studied in the pregnant patient. It should not be used in pregnant women unless, in the judgment of the physician, it is essential for the welfare of the patient, although animal reproductive studies have not resulted in any teratogenic effects.

Usage in Children: The use of SINEQUAN (doxepin·HCl) in children under 12 years of age is not recommended, because safe conditions for its use have not been established.

MAO Inhibitors: Serious side effects and even death have been reported following the concomitant use of certain drugs with MAO inhibitors. Therefore, MAO inhibitors should be discontinued at least two weeks prior to the cautious initiation of therapy with SINEQUAN (doxepin·HCl). The exact length of time may vary and is dependent upon the particular MAO inhibitor being used, the length of time it has been administered, and the dosage involved.

Precautions. Since drowsiness may occur with the use of this drug, patients should be warned of the possibility and cautioned against driving a car or operating dangerous machinery while taking this drug.

Patients should also be cautioned that their response to alcohol may be potentiated.

Since suicide is an inherent risk in any depressed patient and may remain so until significant improvement has occurred, patients should be closely supervised during the early course of therapy.

Although SINEQUAN (doxepin·HCl) has significant tranquilizing activity, the possibility of activation of psychotic symptoms should be kept in mind.

Other structurally related psychotherapeutic agents (e.g. iminodibenzyls and dibenzocycloheptenes) are capable of blocking the effects of guanethidine and similarly acting compounds in both the animal and man. SINEQUAN (doxepin·HCl), however, does not show this effect in animals. At the usual clinical dosage, 75 to 150 mg. per day, SINEQUAN (doxepin·HCl) can be given concomitantly with guanethidine and related compounds without blocking the antihypertensive effect. At doses of 300 mg. per day or above, SINEQUAN (doxepin·HCl) does exert a significant blocking effect. In addition, SINEQUAN (doxepin·HCl) was similar to the other structurally related psychotherapeutic agents as regards its ability to potentiate norepinephrine response in the animal. However, in the human this effect was not seen. This is in agreement with the low incidence of the side effect of tachycardia seen clinically.

Adverse Reactions. Anticholinergic Effects: dry mouth, blurred vision, and constipation have been reported. They are usually mild, and often subside with continued therapy or reduction of dose.

Central Nervous System Effects: drowsiness has been observed. This usually occurs early in the course of treatment, and tends to disappear as therapy is continued.

Cardiovascular Effects: tachycardia and hypotension have been reported infrequently.

Other infrequently reported side effects include extrapyramidal symptoms, gastrointestinal reactions, secretory effects such as increased sweating, weakness, dizziness, fatigue, weight gain, edema, paresthesias, flushing, chills, tinnitus, photophobia, decreased libido, rash, and pruritus.

Dosage. For most patients with illness of mild to moderate severity, a starting dose of 25 mg. t.i.d. is recommended. Dosage may subsequently be increased or decreased at appropriate intervals and according to individual response. The usual optimum dose range is 75 mg./day to 150 mg./day.

In more severely ill patients, an initial dose of 50 mg. t.i.d. may be required with subsequent gradual increase to 300 mg./day if necessary. Additional therapeutic effect is rarely to be obtained by exceeding a dose of 300 mg./day.

In patients with very mild symptomatology, or emotional symptoms accompanying organic disease, lower doses may suffice. Some of these patients have been controlled on doses as low as 25-50 mg./day.

Although optimal antidepressant response may not be evident for two to three weeks, antianxiety activity is rapidly apparent.

Supply. SINEQUAN (doxepin·HCl) is available as capsules containing doxepin HCl equivalent to 10 mg., 25 mg., and 50 mg. of doxepin base in bottles of 100; and 25 mg. and 50 mg. in bottles of 1000.

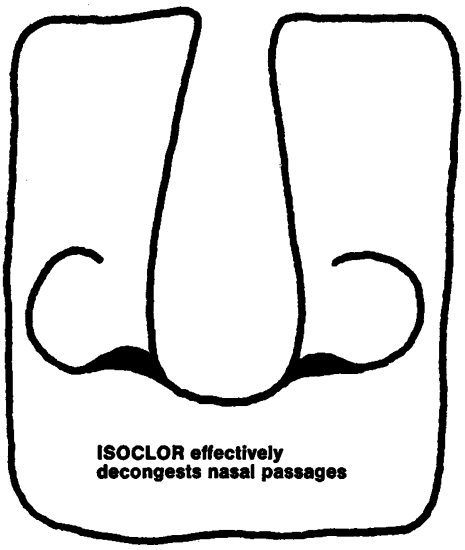
Issued September 1969

Pfizer

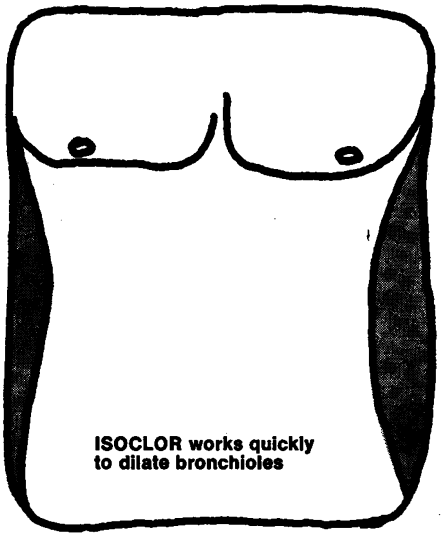
LABORATORIES DIVISION

New York, N.Y. 10017

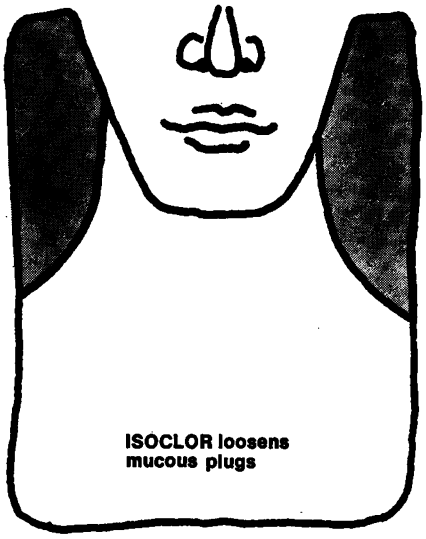
HERE ARE THE COLD FACTS:



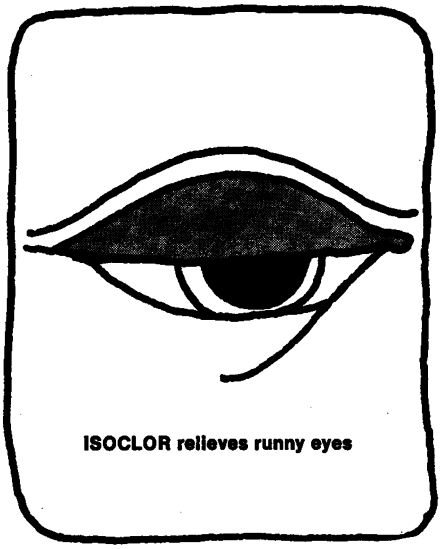
ISOCLOR effectively decongests nasal passages



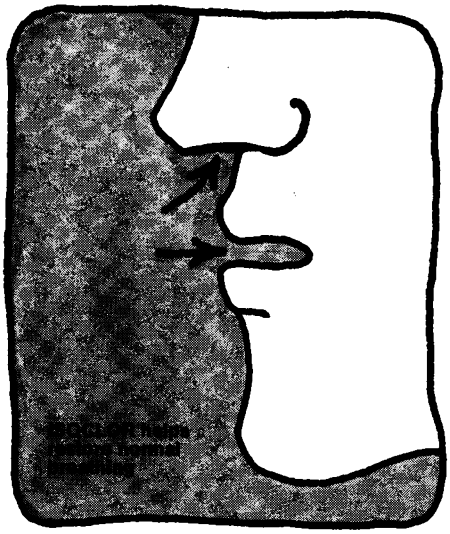
ISOCLOR works quickly to dilate bronchioles



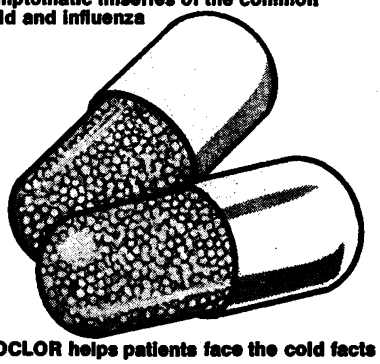
ISOCLOR loosens mucous plugs



ISOCLOR relieves runny eyes



ISOCLOR promptly and effectively combats symptomatic miseries of the common cold and influenza



ISOCLOR helps patients face the cold facts

ISOCLOR®

Isoclor provides quick, long lasting relief of respiratory congestion and discomfort brought on by common colds, influenza, and allergies. Isoclor contains chlorpheniramine maleate — one of the most potent and safest antihistamines. And pseudoephedrine HCl — a decongestant bronchodilator providing effective and long lasting relief for the entire respiratory tract. Both work to extend the range of relief.

COMPOSITION: Each tablet or 2 teaspoonfuls of liquid contains:
Chlorpheniramine Maleate.....4 mg.
Pseudoephedrine HCl.....25 mg.

Each ISOCLOR Timesule contains:

Chlorpheniramine Maleate.....10 mg.
Pseudoephedrine HCl.....65 mg.
In a special pellet form providing both prompt and sustained effect.

INDICATIONS: For symptomatic relief of colds, hay fever, allergic conjunctivitis, perennial rhinitis of allergic origin and sinusitis. Opens nasal, sinus and bronchial passages orally.

CONTRAINDICATIONS: Sensitivity to antihistamines or sympathomimetic agents. Severe hypertension or severe cardiac disease.

PRECAUTIONS: Use with caution in patients suffering with hyperthyroidism. Patients susceptible to the soporific effects of chlorpheniramine should be warned against driving or operating machinery should drowsiness occur.

CAUTION: Federal law prohibits dispensing without prescription.

SUPPLIED: Tablets: Bottles of 100 and 1000. Liquid: 4 oz. bottles, pints, and gallons; Timesules: Bottles of 50, 250, and 1000.

DOSAGE AND ADMINISTRATION:	Tablets	Liquid	Timesule
Adults:	1 q. 4 h.	2 tsp. q. 3-4 h.	1 q. 12 h.
Children 6-12 years:		1 tsp. q. 3-4 h.	
40-50 pounds:		¾-1 tsp. q. 3-4 h.	
30-40 pounds:		½-¾ tsp. q. 3-4 h.	
20-30 pounds:		¼-½ tsp. q. 3-4 h.	
15-20 pounds:		⅛-¼ tsp. q. 3-4 h.	

ARNAR-STONE LABORATORIES, INC.
QUALITY—RESEARCH—SERVICE
SUBSIDIARY OF AMERICAN HOSPITAL SUPPLY CORPORATION
Mount Prospect, Illinois 60056

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently. Large doses of the alka formulation are contraindicated in glaucoma.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Persistent or severe dyspepsia may indicate peptic ulcer; perform upper gastrointestinal x-ray diagnostic tests if drug is continued. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with caution in the first trimester of pregnancy and in patients with thyroid disease.

Precautions: Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. Patients should not exceed recommended dosage, should be closely supervised and should be warned to discontinue the drug and report immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage occur. Make complete blood counts at weekly intervals during early therapy and at 2-week intervals thereafter. Discontinue the drug immediately and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The more common are nausea and edema. Swelling of the ankles or face may be minimized by withholding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension the drug should be discontinued with the appearance of edema. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. The patient should be instructed to take doses immediately before or after meals or with milk to minimize gastric upset. Drug rash occasionally occurs. If it does, promptly discontinue the drug. Agranulocytosis, exfoliative derma-

Sandy sails again! After an arthritic flare-up.

His rheumatoid arthritis flared out of aspirin control. It meant weeks of pain, stiffness, swelling and tenderness...and a lot of sun and wind that somebody else took advantage of.

Next time, after aspirin, consider Butazolidin alka:
prompt anti-inflammatory effectiveness
short trial period
low maintenance dosage
usual dosage: 1 capsule q.i.d. initially, then 1 or 2 daily

Butazolidin® alka

100 mg. phenylbutazone
100 mg. dried aluminum hydroxide gel
150 mg. magnesium trisilicate

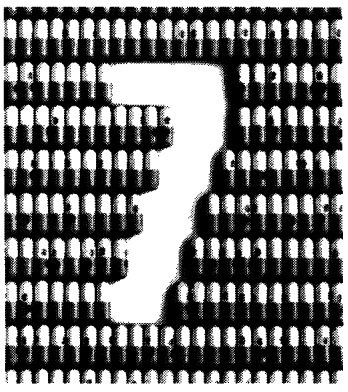
Serious side effects can occur. Select patients carefully (particularly the elderly) and follow them closely in line with the drug's precautions, warnings and contraindications. Read the prescribing information. It's summarized below.

titis, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), or a generalized allergic reaction similar to serum sickness may occur and require permanent withdrawal of medication. Agranulocytosis can occur suddenly in spite of regular, repeated normal white counts. Stomatitis and, rarely, salivary gland enlargement may require cessation of treatment. Such patients should not receive subsequent courses of the drug. Vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported. While not definitely attributable to the drug, a causal relationship cannot be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, hypersensitivity angiitis, pericarditis and several cases of anuria, glomerulonephritis and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Rheumatoid Arthritis: Initial: 3 to 6 capsules daily in 3 or 4 equal doses. Trial period: 1 week. Maintenance dosage should not exceed 4 capsules daily; response is often achieved with 1 or 2 capsules daily. In selecting the appropriate dosage in any specific case, consideration should be given to the patient's weight, general health, age and any other factors influencing drug response. (B)46-070-C

For complete details, please see full prescribing information.

Geigy Pharmaceuticals
Division of
Geigy Chemical Corporation
Ardsley, New York 10502



If it doesn't work in a week, forget it.

BU-6963


Each 5 cc. contain erythromycin estolate equivalent to 250 mg. erythromycin base.
When mixed as directed, each 5 cc. will contain erythromycin estolate equivalent to 125 mg. erythromycin base.
When mixed as directed, each cc. will contain erythromycin estolate equivalent to 100 mg. erythromycin base.
erythromycin estolate equivalent to 125 mg. erythromycin base.
Each Pulvule® contains erythromycin estolate equivalent to 125 mg. erythromycin base.
Each Pulvule contains erythromycin estolate equivalent to 250 mg. erythromycin base.
The many forms of Ilosone®
Erythromycin Estolate
Lilly
Additional information available upon request
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Indianapolis, Indiana 46206
900761

CMA REGIONAL POSTGRADUATE INSTITUTE
FOR SAN JOAQUIN VALLEY COUNTIES

Ahwahnee Hotel, Yosemite

May 8-9, 1970

program:

ADOLESCENT MEDICINE
SENSITIVITY TRAINING
HEMATOLOGY
CORONARY CARE
THE MEDICAL SCHOOL AND THE PRACTICING COMMUNITY

presented cooperatively by

San Joaquin Valley Counties Medical Societies
USC School of Medicine
California Medical Association

host: Fresno County Medical Society
Samuel Ross, M.D., Regional Chairman

guest speaker: Sherrel L. Hammar, M.D., Associate Professor of Pediatrics and Director, Division of Adolescent Medicine, University of Washington, Seattle
(made possible by a grant from Merck, Sharp & Dohme Postgraduate Program)

institute fee: $20.00. For additional information contact:
Continuing Medical Education
California Medical Association
693 Sutter Street, San Francisco 94102

All California Medical Association members and their families are cordially invited to attend.

CONTINUING MEDICAL EDUCATION ACTIVITIES IN CALIFORNIA AND HAWAII

(FORMERLY WHAT GOES ON)

COMMITTEE ON CONTINUING MEDICAL EDUCATION

THIS BULLETIN of information regarding continuing education programs and meetings of various medical organizations in California and Hawaii is supplied by the Committee on Continuing Medical Education of the California Medical Association. In order that they may be listed here, please send communications relating to your future meetings or postgraduate courses to Committee on Continuing Medical Education, California Medical Association, 693 Sutter Street, San Francisco 94102; or phone: (415) 776-9400, extension 241.

ALCOHOLISM AND DRUG USE

March 18—**Alcoholism.** Agnews State Hospital at Agnews State Hopital, San Jose. Wedneday. 1½ hrs. Contact: J. Elizabeth Jeffress, M.D., Agnews State Hospital, San Jose 95114. (408) 262-2100.

May 16 & 23—**The Drug Scene.** University of California Extension, Riverside, at 1500 Life Sciences Building, UC Riverside. Two Saturdays. Primarily for physicians. 14 hrs. Contact: Ray Olitt, Health Services Program Coordinator, UC Extension, Riverside 92502. (714) 787-4329.

CANCER

May 15-16 — **Hormones and Neoplasms—Cancer Conference.** USC at Century Plaza Hotel, Los Angeles. Friday-Saturday. 12 hrs.

COMMUNITY MEDICINE

March 23-26—**The Urban Scene.** American Orthopsychiatric Association at Mark Hopkins and Fairmont Hotels, San Francisco. Monday-Thursday. Delivery of health care services, racism, hunger, dilemmas in welfare and education, law and order, long range urban planning, children designated delinquents, black adolescents, perinatal factors and development, natural history of brain dysfunction, psychological considerations of transplants in children. $25 for non-members. Contact: Marion F. Langer, Ph.D., AOA, 1790 Broadway, New York 10019. (212) 586-5690.

MEDICINE

March 26—Obesity. USC at Hilton Hotel, Los Angeles. Thursday. Recent advances in fat metabolism and behavioral research, feeding habits, management of obesity control. 6 hrs. $30.

April 2-3—**California Thoracic Society—Annual Meeting Scientific Sessions.** Hilton Hotel, San Francisco. Thursday-Friday. New diagnostic techniques in pulmonary disease, TB and other lung infections, young investigators session, the air pollution chain, respiratory care. 12 hrs. Contact: Miss Elma Plappert, Exec. Sec., CTS, 424 Pendleton Way, Oakland 94621. (415) 636-1756.

April 3-4 — **Arrhythmias in Clinical Practice.** Sacramento-Yolo-Sierra Heart Association at Sacramento Inn, Sacramento. Friday-Saturday. Relevant anatomy and physiology, pharmacology, clinical recognition and treatment of rhythm disturbances of the heart. $15. 10 hrs. Contact: Harold M. Lowe, M.D., Chairman, Symposium Committee, Sacramento-Yolo-Sierra Heart Assoc., Dept. of Cardiovascular-Pulmonary Diseases, Mercy Hospital, 4001 J Street, Sacramento 95819. (916) 456-7881.

KEY TO ABBREVIATIONS AND SYMBOLS

Medical Centers and CMA Contacts for Information

CMA: California Medical Association
Contact: Continuing Medical Education, California Medical Association, 693 Sutter Street, San Francisco 94102. (415) 776-9400, ext. 241.

LLU: Loma Linda University
Contact: John E. Peterson, M.D., Associate Dean for Research Affairs, Loma Linda University School of Medicine, Loma Linda 92354. (714) 796-7311.

PMC: Pacific Medical Center
Contact: Arthur Selzer, M.D., Chairman, Education Committee, Pacific Medical Center, Clay and Webster Streets, San Francisco 94115. (415) 931-8000.

STAN: Stanford University
Contact: Thomas A. Gonda, M.D., Associate Dean, Stanford University School of Medicine, 300 Pasteur Drive, Stanford 94305. (415) 321-1200, ext. 5371.

UCD: University of California, Davis
Contact: George H. Lowrey, M.D., Professor and Chairman, Department of Postgraduate Medicine, University of California, Davis, School of Medicine, Davis 95616. (916) 752-0331.

UCI: University of California — California College of Medicine, Irvine
Contact: Robert Combs, M.D., Associate Dean, University of California, Irvine—California College of Medicine, Irvine 92664. (714) 833-5991.

UCLA: University of California, Los Angeles
Contact: Donald Brayton, M.D., Associate Dean and Head, Continuing Education in Medicine and the Health Sciences, 15-89 Rehabilitation Center, UCLA Center for the Health Sciences, Los Angeles 90024. (213) 825-6514.

UCSD: University of California, San Diego
Contact: Michael Shimkin, M.D., Associate Dean for Health Manpower, 1309 Basic Sciences Building, University of California, San Diego, School of Medicine, La Jolla 92038. (714) 453-2000, ext. 2704.

UCSF: University of California, San Francisco
Contact: Seymour M. Farber, M.D., Dean, Educational Services and Director, Continuing Education, Health Sciences, University of California Medical Center, San Francisco 94122. (415) 666-1692.

USC: University of Southern California
Contact: Phil R. Manning, M.D., Associate Dean, Postgraduate Division, University of Southern California School of Medicine, 2025 Zonal Avenue, Los Angeles 90033. (213) 225-1511, ext. 203.

April 3-5—**Sixth Annual Symposium—San Diego Society of Internal Medicine.** Warner Springs Resort, San Diego County. Friday-Sunday. Pulmonary Disease. $15. 12 hrs. Contact: Thomas J. Lehar, M.D., Program Chairman, 6th Annual Symposium, 2001 Fourth Ave., San Diego 92101. (714) 234-6261.

April 6-15—**Cardiology for the Consultant—A Clinician's Retreat.** American College of Cardiology at Rancho Santa Fe Inn, Rancho Santa Fe. Ten day program for well-trained clinicians to sharpen ability in the field of cardiology. 52 hrs. Contact: William D. Nelligan, Exec. Dir., ACC, 9650 Rockville Pike, Bethesda, Md. 20014. (301) 530-1600.

April 6-17—**Coronary Care Unit Program for Physicians.** CRMP Area V at Los Angeles County-USC Medical Center. Two week course repeated monthly through June, 1970. Arrhythmia detection, diagnosis and therapy, defibrillation and cardioversion, central venous pressure monitors, placement of pacing catheters, new aspects in diagnosis and treatment of congestive heart failure, shock and associated respiratory problems, and CCU management in community hospitals. Contact: Gladys Ancrum, Dr. P. H., Administrative Associate, CRMP Area V, 1 West Bay State St., Alhambra 91801. (213) 576-1626.

April 8—**18th Annual Physicians Cardiovascular Symposium.** Central Valley Heart Association at Fresno Travel Host, Fresno. Wednesday. Premature Coronary Atherosclerosis, Angina Pectoris, Arrhythmias Accompanying Acute Myocardial Infarction, Hyperlemic Patient, Cardiac Auscultation in Pregnancy, Effect of Pharmacological Agents and Postural Changes on Heart Murmurs, Valvular Heart Disease Surgery, Digitalis Glycosides. $20. 7 hrs. Contact: Frances Cuthbertson, Exec. Dir., CVHA, 1759 Fulton Street, Fresno 93721. (209) 237-0288.

April 8-9—**Medical Surgical Gastroenterology.** USC at Hilton Hotel, Los Angeles. Wednesday-Thursday. 12 hrs.

April 10—**Annual Symposium on Heart Disease.** Orange County Heart Association at Disneyland Hotel, Anaheim. Friday. Contact: Liggett McLaws, Program Dir., OCHA, P.O. Box 1704, Santa Ana 92702. (714) 947-3001.

April 10 — **13th Annual Physicians Symposium on Heart Disease.** Santa Clara County Heart Association at San Jose Hyatt House, San Jose. Friday. $15. 6 hrs. Contact: William G. Allayaud, Exec. Dir., SCCHA, 1984 The Alameda, San Jose 95126. (408) 248-1517.

April 11—**Myocardial Infarction.** PMC. Saturday. Principles and techniques in a coronary care unit, electrocardiographic diagnosis, therapeutic approach to arrhythmias, heart failure in myocardial infarction, cardiac rehabilitation and the value of exercise, anticoagulation. $35. 8 hrs.

April 22-25—**Advances in Endocrinology and Metabolism.** UCSF. Wednesday-Saturday. Intensive review of interrelationships between metabolic disease and endocrine dysfunction, critical evaluation of new developments.

May 4-15—**Coronary Care Unit Program for Physicians.** CRMP Area V. See Medicine, April 6-17.

May 4-22—**Coronary Care for Physicians Training Program.** CRMP Area IV and Cedars-Sinai Medical Center at Cedars of Lebanon Hospital, Los Angeles. Three week course repeated six times through November, designed for practicing internists or cardiologists who will subsequently be working in or directing CCU in community hospitals. Electrocardiography, physical diagnosis, CCU planning and administration, electrolytes and acid-base metabolism, emphasis on practical techniques. Contact: Herbert Stein, M.D., Coronary Care for Physicians Training Programs, Dept. of Cardiology, Cedars of Lebanon Hospital, Box 54265, Los Angeles 90029. (213) 662-9111, ext. 306.

May 9—**Symposium on Clinical Pharmacology and Drug Therapy.** Division of Clinical Pharmacology, Department of Medicine, STAN, and Palo Alto Medical Clinic at STAN. Saturday. $15, no fee for medical students and house staff. Contact: Stanley N. Cohen, M.D., Room S-161, STAN. (415) 321-1200, ext. 6021.

May 9—**Disease of the Gastrointestinal Tract.** See Radiology—Pathology, May 9.

May 12—**Analytical Approach to Cardiac Diagnosis.** American College of Cardiology and LLU at LLU. Tuesday. Representative cases of heart disease: history, examination, laboratory and radiological procedures. 7 hrs. Contact: William D. Nelligan, Exec. Dir., ACC, 9650 Rockville Pike, Bethesda, Md. 20014. (301) 530-1600.

May 13-14—**Coronary Care.** USC at Hilton Hotel, Los Angeles. Wednesday-Thursday. 12 hrs.

May 15—**California Heart Association—Annual Meeting Scientific Sessions.** Hotel del Coronado, Coronado. Friday. Coronary thrombosis and myocardial infarction, problems in ECG diagnosis of myocardial infarction, premature coronary disease, coronary arteriography. $10. 7 hrs. Contact: Rodman D. Starke, M.D., 1370 Mission St., San Francisco 94103. (415) 626-0123.

May 15-17—**Basic Principles of Cardiac Therapy.** PMC and the American College of Cardiology at Jack Tar Hotel, San Francisco. Friday-Sunday. Clarification of pathophysiological basis of various disease states, rational approach to drug usage. $80 members, $120 non-members. 24 hrs. Contact: PMC.

May 16-17—**The Stroke Patient.** Granada Hills Community Hospital and San Fernando Valley State College Health Sciences Department at Main Auditorium, Speech Building, San Fernando Valley State College, Los Angeles. Saturday-Sunday. $10. 16 hrs. Contact: Arno A. Roscher, M.D., Program Chairman, Granada Hills Community Hospital, 10445 Balboa Blvd., Granada Hills 91344. (213) 360-1021.

May 22-23—**Instrumental Acquisition of Cardiological Data with Clinical Correlation.** American College of Cardiology, Memorial Hospital of Long Beach, and Long Beach Heart Association at Memorial Hospital of Long Beach. Friday-Saturday. $55. 14 hrs. Contact: William D. Nelligan, Exec. Dir., ACC, 9650 Rockville Pike, Bethesda, Md. 20014. (301) 530-1600.

May 25-28—**International Conference on Vascular Diseases of the Brain and Spinal Cord.** American Academy of Neurology, USC and Rancho Los Amigos Hospital at Anaheim Convention Center, Anaheim. Monday-Thursday. U.S. and international papers, rehabilitation team personnel invited. Limited traineeships available. $125. 18 hrs. Contact: Richard P.

Boggs, M.D., Chief, Division of Neurological Sciences, Rancho Los Amigos Hospital, 7601 E. Imperial Highway, Downey 90242. (213) 869-0921.

June 1-12—**Coronary Care Unit Program for Physicians.** CRMP Area V. See Medicine, April 6-17.

June 5-6—**Vectorcardiography.** UCSF. Friday-Saturday.

June 15-July 3—**Coronary Care for Physicians Training Program.** CRMP Area IV. See Medicine, May 4-22.

Continuously—Basic Home Course in Electrocardiography. One year postgraduate series, ECG interpretation by mail. Physicians may register at any time. $100 (52 issues). Contact: USC.

Continuously—**Training in the Procedure of Tonometry.** Northern California Society for the Prevention of Blindness at the Glaucoma Screening Clinic, San Francisco. Weekly Saturday morning program in tonometry for internists and general practitioners. Advance appointment required, no charge. 3 hrs. Contact: Frederic S. Weisenheimer, Ed.D., Exec. Dir., NCSPB, 4200 California Street, San Francisco 94118. (415) 387-0934.

Grand Rounds—Medicine

Tuesdays

8:30-10:00 a.m., Assembly Hall, Harbor General Hospital, Torrance. UCLA.

Wednesdays

10:30-12:00 noon. Auditorium, Medical Sciences Building. UCSF.

11:00 a.m., Room 1645, Los Angeles County-USC Medical Center. USC.

12:30 p.m., Auditorium, School of Nursing, Orange County Medical Center. UCI.

12:30-1:30 p.m., University Hospital, UCSD.

Thursdays

10:30-12:00 noon, Room 33-105, UCLA Medical Center. UCLA.

Fridays

8:00 a.m., Courtroom, Third Floor, Kern County General Hospital, Bakersfield. CRMP Area IV.

8:30 a.m., Auditorium, Lebanon Hall, Cedars of Lebanon Hospital, Los Angeles. CRMP Area IV.

Neurology. 10:15 a.m., held alternately at Stanford University Hospital and Neurology Conference Building 7, V.A. Hospital, Palo Alto. STAN.

1st and 3rd Fridays, 11:00 a.m., Auditorium, Brown Building, Mount Sinai Hospital, Los Angeles. CRMP Area IV.

1:15 p.m., Lieb Amphitheater, Timken-Sturgis Research Bldg., La Jolla. Scripps Clinic and Research Foundation.

Rheumatology Grand Rounds. 11:45 a.m., Room 6441, Los Angeles County-USC Medical Center, Los Angeles. USC.

MENTAL RETARDATION

May 22-23—**The Mentally Retarded Adult in the Community.** UCSF. Friday-Saturday.

June 8-19—**Mental Retardation.** UCLA and Pacific State Hospital, Pomona, at UCLA Neuropsychiatric Institute. Two weeks. For physicians and allied professionals. Causation, symptomatology, care, treatment and management, diagnostic techniques suitable for office practice, parental reactions and intra-family psycopathology, recent research findings. 80 hrs. Contact: UCLA.

OBSTETRICS AND GYNECOLOGY

May 2-3—**Female Urology.** Tri-County Obstetrical and Gynecological Society at Santa Barbara Biltmore Hotel, Santa Barbara. Saturday-Sunday. 10 hrs. Contact: Jack R. Robertson, M.D., 1430 E. Main St., Suite 202, Santa Maria 93454. (805) 925-8759.

May 15-16—**Obstetrics and Gynecology Symposium.** Southern California Permanente Medical Group and Kaiser Foundation Hospitals at Beverly Hilton Hotel, Beverly Hills. Friday-Saturday. Contact: Shirley Gach, Rm. 6014. So. Calif. Permanente Med. Group, 4900 Sunset Blvd., Los Angeles 90027. (213) 663-8411.

Grand Rounds—Obstetrics and Gynecology

Mondays

10-11:30 a.m., Assembly Room, First Floor, Harbor General Hospital, Torrance. UCLA.

Fridays

8 a.m., Auditorium, Orange County Medical Center. UCI.

PEDIATRICS

March 20-21—**Pulmonary Disease in Newborns.** UCI, CRMP Area VIII in cooperation with the National Cystic Fibrosis Research Foundation at Childrens Hospital of Orange County. Friday-Saturday. Registration by March 1 is necessary. 8½ hrs. Contact: Bruce D. Ackerman, M.D., Dept. of Pediatrics, UCI.

April 3-4—**Pediatric Symposium—Nephrology.** Southern California Permanente Medical Group and Kaiser Foundation Hospitals at Ambassador Hotel, Los Angeles. Friday-Saturday. Contact: Shirley Gach, Rm. 6014, So. Calif. Permanente Med. Group, 4900 Sunset Blvd., Los Angeles 90027. (213) 663-8411.

April 4-5—**Armchair Allergy.** PMC at International Inn, San Francisco. Saturday-Sunday. Early diagnosis, role of steroids in management of asthma, skin tests, current concept of the basic steps in the allergic reaction. $50. 14 hrs.

April 18—**Infectious Diseases.** UCSF at Childrens Hospital, San Francisco. Saturday. For pediatricians, family physicians, internists and clinically oriented bacteriologists. 5½ hrs.

April 22-25—**The Hospitalized Child, His Family and His Community.** American Association for Child Care in the Hospital, Stanford Childrens Convalescent Hospital, UCSF and STAN at Sheraton-Palace Hotel, San Francisco. Wednesday-Saturday. 15 hrs. Contact: Helen H. Glaser, M.D., Stanford Childrens Convalescent Hospital, 520 Willow Road, Palo Alto 94304. (415) 327-4800.

May 7-9—**Advances in Pediatrics.** UCSF. Thursday-Saturday. Review of major reappraisals in some aspects of the specialty, clinical implications of advances in cytology, physiology, immunology and endocrinology.

May 18-19—**Hearing in Children.** UCLA. Monday-Tuesday.

May 21-22—**Pediatric Otology—Medical Otosurgical Problems.** UCLA. Thursday-Friday.

Grand Rounds—Pediatrics

Tuesdays

8:00 a.m., Childrens Hospital Medical Center, Oakland.

8:30 a.m., Auditorium, Childrens Division Building, Los Angeles County-USC Medical Center, Los Angeles. USC.

8:30 a.m., Room 4-A, Kern County General Hospital, Bakersfield. CRMP Area IV.

8:30 a.m., Pathology Auditorium, San Francisco General Hospital.

Wednesdays

8-9:00 a.m., held alternately at Auditorium, Orange County Medical Center and Auditorium, Childrens Hospital of Orange County. UCI.

8:30 a.m., Bothin Auditorium, Childrens Hospital, San Francisco.

Thursdays

8:30-10:00 a.m., Room 664, Science Building, UCSF.

8:30-9:30 a.m., Lebanon Hall, Cedars of Lebanon Hospital, Los Angeles.

8:30 a.m., First Floor Auditorium, Harbor General Hospital, Torrance.

Fridays

8:00 a.m., Lecture Room, A Floor, Health Sciences Center, UCLA. CRMP Area IV.

8:30 a.m., Stanford University Medical Center, Palo Alto.

8-9:00 a.m., Lecture Hall, Childrens Hospital of Los Angeles.

Infectious Disease Grand Rounds. 10:00 a.m., Auditorium, Childrens Division Building, Los Angeles County-USC Medical Center, Los Angeles. USC.

PSYCHIATRY

March 20-21 — **Suicide Prevention—Advanced Workshop.** UCSF. Friday-Saturday. Staffing, program evaluation and funding of suicide centers; research in suicide prevention; follow-up systems and methods; data collection.

March 21—**Psychiatric Perspectives in Medicine—An Introduction to Family Evaluation and Family Intervention.** UCSF at Stockton State Hospital, Stockton. Saturday. Principles of family organization, methods of family assessment, demonstration of family interview. 4½ hrs. $7.50.

March 23-26—**The Urban Scene.** American Orthopsychiatric Association. See Community Medicine, March 23-26.

April 4-5—**The Brain and Its Behavior.** UCSF at Agnews State Hospital, San Jose. Saturday-Sunday. New developments in chemistry, neuroanatomy, and neurophysiology related to human behavior. $15. 11 hrs.

April 4-5—**The Psychiatrist Consultant in Therapeutic Abortion.** USC Division of Postgraduate Psychiatry at Sheraton Universal Hotel, North Hollywood. Saturday-Sunday. For psychiatrists only. $35. 10 hrs. Contact: Donald F. Naftulin, M.D., Director, Division of Postgraduate Psychiatry, USC. (213) 225-1511, ext. 336.

April 8-June 10—**Group Methods.** UCSF at V.A. Hospital, San Francisco. Wednesdays 11:30-1:00. Weekly lectures and participants assigned to clinic groups. $25. 15 hrs.

April 11-12—**The Suicidal Patient: New Approaches to Recognition and Treatment.** UCLA. Saturday-Sunday. Presentation of some of the special treatment diagrams now used at UCLA Neuropsychiatric Institute. $60. 11½ hrs.

April 18 & 25—**Critical Issues in Mental Health.** University of California Extension, Riverside, at Cafeteria, University Commons, UC Riverside. Two Saturdays. 14 hrs. Contact: Ray Olitt, Health Services Coordinator, UC Extension, Riverside 92502. (714) 787-4329.

May 2—**Use of Imagination in Psychotherapy.** UCSF. Saturday. Dreams and Fantasies in Psychoanalytically Oriented Psychotherapy, Images in Jungian Therapy, Image Formation Techniques in Gestalt Therapy, Systematic Desensitization— A Form of Behavior Therapy, Implosive Therapy, Uses of Image Formation in Other Schools of Therapy. 5½ hrs.

May 2-3—**Further Explorations in Group Therapy.** UCSF at Modesto State Hospital, Modesto. Saturday-Sunday.

May 7-11 — **American Psychoanalytic Association.** Sheraton Palace Hotel, San Francisco. Thursday-Monday. $15 for non-members. Contact: Mrs. Helen Fischer, Exec. Sec., APA, 1 East 57th Street, New York 10022. (212) 265-0430.

May 8-10—**American Academy of Psychoanalysis—Annual Meeting.** Jack Tar Hotel, San Francisco. Friday-Sunday. Contact: Mollie Carroll, 125 East 65th Street, New York 10021. (212) 879-8950.

May 8-10—**Society for Biological Psychiatry.** Hilton Hotel, San Francisco. Friday-Sunday. Personality Disorders. 24 hrs. Contact: George N. Thompson, M.D., Sec.-Treas., SBP, 2010 Wilshire Blvd., Los Angeles 90017. (213) 483-7863.

May 9-10—**Psychiatry and the Law.** UCSF at Humboldt State College, Arcata. Saturday- Sunday.

May 10—**Association for the Advancement of Psychotherapy.** Civic Auditorium, San Francisco. Sunday. Contact: Stanley Lesse, M.D., Pres., AAP, 15 W. 81st Street, New York 10024. (212) 873-9233.

May 11-15—**American Psychiatric Association.** Civic Auditorium and Brooks Hall, San Francisco. Monday-Friday. Contact: Robert S. Garber, M.D., Exec. Sec., Carrier Clinic, Belle Mead, New Jersey 08502. (201) 359-3101.

May 14-16—**Mental Health — 2½ Day Symposium.** UCSF. Thursday-Saturday.

May 16-17—**Progress in Psychotherapy.** UCSF at Napa State Hospital, Imola. Saturday-Sunday.

May 23-24—**Residential Care for the Mentally Ill Patient.** UCSF at DeWitt Hospital, Auburn. Saturday-Sunday.

RADIOLOGY—PATHOLOGY

April 1-5—**Clinical Cytology for Pathologists.** UCSF at St. Francis Hotel, San Francisco. Wednesday-Sunday.

Cytopathology of urinary tract, female genital tract following irradiation, non-neoplastic lesions of the lung. $75. 10½ hrs.

April 17-30—**Radiology of the Gastrointestinal Tract.** USC, Princess Carla Cruise to Mexico from Los Angeles. Two weeks. $200. 28 hrs.

May 9—**Diseases of the Gastrointestinal Tract.** South Bay Radiology Society and South Bay Pathology Society at Carmel Theater, Carmel. Saturday 1:30-5:30. Separate morning workshop in tube biopsy processing technique and interpretation. 4 hrs. Contact: Robert Rinehart, M.D., Dept. of Pathology, Santa Clara Valley Medical Center, 751 South Bascom Ave., San Jose 95128. (408) 293-0262, ext. 491.

May 16—**Radiology Society of Southern California.** Hotel del Coronado, Coronado. Saturday. Contact: Gladden V. Elliott, M. D., 5565 Grossmont Center Drive, Suite 1, La Mesa 92041.

Continuously—**Principles and Clinical Uses of Radioisotopes.** UCSF. Fundamentals for the proper understanding and use of radioactivity in clinical medicine. Training in diagnostic and therapeutic uses of radioisotopes. Normal period of training: 3 months. Two part course: Part A, Basic Fundamentals; Part B, Clinical Applications.

Continuously — **Mammography.** UCSF Mammography Section, Department of Radiology. Three days weekly, beginning with Tuesday. Call several days in advance. Contact: Richard H. Gold, M.D., Mammography Section, Department of Radiology, UCSF. (415) 666-1918.

Grand Rounds—Radiology

Fridays

Neuroradiology Grand Rounds. 9:30 a.m., held alternately at Stanford University Hospital and Neurology Conference Building 7, V.A. Hospital, Palo Alto, STAN.

SURGERY—ANESTHESIOLOGY

March 25-28—**Neurosurgical Society of America.** Ojai Valley Inn, Ojai, Calif. Wednesday-Saturday. Contact: William F. Collins, M.D., Secretary, NSA, 789 Howard Avenue, New Haven, Conn. 06510. (203) 436-1212.

April 8-9 — **Medical Surgical Gastroenterology.** See Medicine, April 8-9.

April 9-10—**General Surgery.** UCSF at St. Francis Hotel, San Francisco. Thursday-Friday. Emergency room problems, current concepts of surgery for bleeding varices, chronic pancreatitis, cholecystitis, ulcerative colitis, diverticulitis, intestinal fistula, abdominal trauma. Recent observations in advanced breast cancer, malignant disease, calcium metabolism, gastric physiology. $65. 11½ hrs.

April 11-12—**Los Angeles County Society of Anesthesiologists—15th Annual Postgraduate Assembly.** Los Angeles Hilton Hotel. Saturday-Sunday. 15 hrs. Contact: Leo A. Parker, M.D., 8422 Jamieson St., Northridge 91324. (213) 345-6763.

June 4-6—**Highlights of Ophthalmology.** PMC Department of Ophthalmology at PMC. Thursday-Saturday. Cryosurgery, Fluorescein angiography, glaucoma, cataract surgery, diabetic retinopathy, retinal detachment, adhesives in surgery, contact lenses and ultrasonography. $125. Contact: Wayne L. Erdbrink, M.D., Director of Residency Training, Dept. of Ophthalmology, PMC.

June 4-6—**Rheumatoid Arthritic Surgery.** UCSF and American Academy of Orthopaedic Surgeons at UCSF. Thursday-Saturday. Contact: UCSF.

June 12-14—**California Society of Anesthesiologists—4th Biennial Scientific Meeting.** Sahara-Tahoe Hotel, South Shore, Lake Tahoe. Friday-Sunday. The Anesthesiologist and His Relationship to Other Specialties. 8 hrs. Contact: Norman R. Catron, Exec. Sec., CSA, 100 So. Ellsworth Ave., Suite 401, San Mateo 94401. (415) 343-4644.

Grand Rounds—Surgery

Wednesdays

7:15 a.m., Auditorium, Kern County General Hospital, Bakersfield. CRMP Area IV.

1st and 3rd Wednesdays. 11:00 a.m., Auditorium, Brown Building, Mount Sinai Hospital, Los Angeles. CRMP Area IV.

Thursdays

Neurology and Neurosurgery Grand Rounds. 11:00-12:15. Room 663, Science Building, UCSF.

Fridays

1-2:00 p.m., Auditorium, Orange County Medical Center, Orange. UCI.

Neurosurgery. 11:15 a.m., held alternately at Stanford University Hospital and Neurology Conference Building 7, V.A. Hospital, Palo Alto, STAN.

Saturdays

8:00 a.m., Auditorium, 1st floor, University Hospital of San Diego County, San Diego. UCSD.

9:00 a.m., Room 73-105, Health Sciences Center, UCLA. CRMP Area IV.

8:30 a.m., Assembly Room, Harbor General Hospital, Torrance. CRMP Area IV.

OF INTEREST TO ALL PHYSICIANS

March 18—**Annual Medical Staff Symposium—Memorial Hospital of Long Beach.** Memorial Hospital of Long Beach. Wednesday. Contact: Norman R. Nager, Director of Public Relations, Memorial Hospital of Long Beach, 2801 Atlantic Avenue, Long Beach 90801. (213) 595-2311.

March 18—**Advances in Clinical Genetics.** USC. Wednesday. Application of genetics information to problems in clinical medicine. Methods of diagnosis and changes in patient management due to advances in clinical genetics. $25. 6 hrs.

March 19-20 — **Postgraduate Seminar and Clifford Sweet Memorial Lecture. Childrens Hospital of Oakland.** Thursday-Friday. Sex Education for Physicians. Contact: Inetta Carty, Childrens Hospital of Oakland, 51st and Grove Streets, Oakland 94609. (415) 654-5600.

March 25-26 — Los Angeles County Heart Association and Los Angeles Academy of General Practice—Seventh Annual Spring Symposium for Physicians Practicing General Medicine. Wednesday-Thursday.

CMA Postgraduate Institutes and Circuit Courses

April 2-3—**West Coast Counties Regional Postgraduate Institute.** CMA, UCD and Monterey County Medical Society at Del Monte Hyatt House, Monterey. Thursday-Friday. Endocrine Problems with Children (including Diabetes), Infectious Diseases, Cardiac Disease and its Rehabilitation, the Physician and Family Problems. $20. 12 hrs. Contact: CMA.

May 8-9—**San Joaquin Valley Counties Regional Postgraduate Institute.** CMA, USC, and Fresno County Medical Society at Ahwahnee Hotel, Yosemite. Friday-Saturday. Concurrent symposia in Adolescent Medicine, Coronary Care, Sensitivity Training, and Problems in the Practice of Medicine. $20. 10 hrs. Contact: CMA.

May 15-16 — **Redwood Regional Conference.** CMA, UCSF at Konocti Harbor Inn, Clear Lake. Friday-Saturday. The Anemias and Musculo/Skeletal Conditions in Daily Practice. $20. Contact: CMA.

Contact: Joe Kennelly, Director, Public Information, LACHA, 2405 W. Eighth Street, Los Angeles 90057. (213) 385-4231.

April 17-18—**Infectious Diseases.** UCSF. See Pediatrics, April 17-18.

April 19—**Office Emergencies: A Symposium for Medical Assistants.** UCSF. Sunday. $12.50. 6 hrs.

April 23-25—**First Annual Hospital Medical Staff Conference—Medical Staff Leadership: Fact or Fiction.** USC at Monte Corona Conference Center, Twin Peaks. Thursday-Saturday. $100. 18 hrs.

April 23-May 21—**Environmental Pollution.** UCLA. Thursdays.

April 25-26—**Sex in Modern Society.** UCSF at Flamingo Motor Hotel, Santa Rosa. Saturday-Sunday. $15. 8 hrs.

May 1-2—**Trauma.** UCSF at Mary's Help Hospital, Daly City. Friday-Saturday.

May 3-9—**Hawaii Medical Association.** Hawaiian Village, Honolulu. Sunday-Saturday. Contact: Miss Lee McCaslin, Exec. Sec., HMA, 510 Beretania Street, Honolulu 96813. (808) 536-7702.

May 6—**Annual Seminar—N.E. Sub-Chapter, Los Angeles County Academy of General Practice.** Santa Teresita Hospital, Duarte. Wednesday. $15. 3 hrs. Contact: John A. Corbin, M.D., 924 Buena Vista Avenue, Duarte 91010 (213) 358-455.

May 8-9—**Population Explosion, Birth Control, Sexual Revolution.** University of California Extension, Riverside, at Watkins Hall, UC Riverside. Friday-Saturday. 10 hrs. Contact: Ray Olitt, Health Services Program Coordinator, UC Extension, Riverside 92502. (714) 787-4329.

May 20—**Medical Practices in Central America and Mexico.** Agnews State Hospital at Agnews State Hospital, San Jose. Wednesday. 1½ hrs. Contact: J. Elizabeth Jeffress, M.D., Agnews State Hospital, San Jose 95114. (408) 262-2100.

May 22-23—**Conference on Pregnant Teenagers.** USC at International Hotel, Los Angeles. Friday-Saturday. 12 hrs.

May 22-24—**California Medical Assistants Association—Annual Convention.** International and Hilton Hotels, Los Angeles. Friday-Sunday. Contact: Kay Marsh, 7271 Katella Avenue #19, Stanton 90680. (714) 828-3525.

May 29-July 1—**Medical Centers of Europe.** USC. Five weeks. Visiting medical centers in Dublin, London, Amsterdam, Moscow, Vienna, Rome, Venice-Lido, Paris.

Continuously—**Audio-Digest Foundation.** A non-profit subsidiary of CMA. Twice-a-month tape recorded summaries of leading national meetings and surveys of current literature. Services by subscription in: General Practice, Surgery, Internal Medicine, Ob/Gyn, Pediatrics, Anesthesiology, Ophthalmology. Catalog of lectures and panel discussions in all areas of medical practice also available. Contact: Mr. Claron L. Oakley, Editor, 619 S. Westlake Ave., Los Angeles 90057.

TELEVISION

Southern California's Medical Television Network. UCLA. Weekly broadcasts, Tuesdays 8:30 a.m. Contact: UCLA Medical Television. (213) 825-2071.

March 17—**Valvular Heart Disease, Part II.** Washington-Alaska Regional Medical Programs.

March 24—**Valvular Heart Disease, Part III.** Washington-Alaska Regional Medical Programs.

March 31 — **Inhalation Therapy and IPPB.** Medical Television Network.

April 7—**Resuscitation of the Newborn.** British Broadcasting Corporation.

April 14—**Itch, Scratch, Itch: A Viscious Cycle.** University of Western Ontario, Canada.

April 21—**Malnutrition.** Medical Television Network.

April 28—**Management of Schizophrenia in the Community.** Medical Television Network.

Santa Clara County Medical Society's MD-TV. Weekly broadcasts. Thursdays 8:30 p.m. Channel 54, Greater San Jose Area. Of educational value to both physicians and nurses. Contact: Roger Brown, Santa Clara County Medical Society, 700 Empey Way, San Jose 95128 (408) 286-5050.

Heart Disease

What Do We Know About Diet As a Risk Factor?

LAURENCE M. HURSH, M.D.

WHAT IS CORONARY HEART DISEASE? How does it affect the heart? The heart is a muscular organ which pumps blood throughout the body. Every part of the body needs blood to supply oxygen and nutrients, and to carry away waste products. The action of the heart is vital to life.

Like all other organs, the heart itself needs a blood supply to function. Blood to nourish the heart muscle is carried by the right and left *coronary arteries.* These are small blood vessels about the size of a drinking straw.

Coronary heart disease is a term used to describe conditions of the coronary arteries that may cause damage to the heart. During life, the coronary arteries may gradually become narrowed with *atherosclerosis.* This is a buildup of patches of fatty material and other substances in the smooth inner wall of the artery. In addition, the artery becomes less elastic.

If blood flow through the diseased coronary artery is reduced, a person may suffer from *angina.* This is a sudden vise-like pain in the chest, and it may be caused by unusual physical effort or strain. If the blood supply to the heart is severely reduced, or cut off completely, a *heart attack* usually occurs.

Laurence M. Hursh, M.D., is Professor of Health Science, University of Illinois at Urbana, and Director of Health Services at this university. He is also Staff Physician at McKinley Hospital, Urbana.

Dr. Hursh has had wide experience in medicine and nutrition. In a 20-year career with the U.S. Army, he had held the positions of Commanding Officer, U.S. Army Medical Research and Nutrition Laboratory, Fitzsimons Army Hospital, Denver, Colo., and Chief, Medical Research Branch, U.S. Army Medical Research and Development Command, Washington, D.C.

He is a member of the American Medical Association and a Fellow of the American College of Physicians. He also holds membership in the American Institute of Nutrition and the American Society for Clinical Nutrition. In addition, he is certified by the American Board of Nutrition.

Dr. Hursh has published a number of articles in scientific journals. He also writes about everyday nutrition problems in the newspaper and frequently broadcasts on the radio.

Complete blockage of the artery may be caused by atherosclerosis itself, or by *coronary thrombosis.* Thrombosis is the formation of a blood clot in the narrowed passageway. All, or part of the heart is then without enough blood, and the heart muscle is damaged from lack of oxygen. Sometimes the heart is put out of action altogether. Some 40 percent of "coronary" victims die from their first heart attack.

What causes coronary heart disease? Unlike infectious diseases such as measles, coronary heart disease cannot be pinned down to a single cause — it is not a simple process.

Atherosclerosis does not always produce heart damage. Coronary thrombosis is one severe and often fatal complication of atherosclerosis. There may be other conditions that trigger a heart attack. We don't know if coronary thrombosis is caused by atherosclerosis or whether the two processes are entirely separate.

Coronary disease is much more common in wealthy industrialized countries than in poorer countries. Immigrants to the United States from Ireland, southern Italy and rural districts of Norway generally develop more coronary disease than their counterparts back home. Exposure to the American way of life seems to give them "American" hearts, and makes them more prone to heart disease.

How is our way of life related to heart disease? Since the turn of the century, there has been great increase in coronary heart disease. This increase is probably related to parallel changes in our pattern of living during this time.

Life has become more urban and highly mechanized; we ride elevators, buses and automobiles instead of walking; we experience more stress, smoke more cigarettes and engage in less physical activity; the kinds of food we eat have changed.

Risk Factors

Certain *risk factors* have been associated with greater likelihood of developing coronary disease. Risk factors are associations and not necessarily causes. However, coronary proneness seems to increase with every risk factor a person is exposed to. The risk factors are:

Family history—If either parent has a record of coronary disease, a person's chances of developing it are greater.

Sex—The disease is more common in men than women, until the age of about 55. Then incidence in women is about the same.

Age — Risk increases with age. Coronary heart disease is most common in late middle age. However, it is appearing increasingly earlier in life, particularly in men aged 35-45.

Smoking — A cigarette smoker runs about twice the coronary risk of a nonsmoker. A heavy cigarette smoker runs even greater risk.

Stress—It is difficult to know what creates "stress" in a person. The cave man, for instance, lived in continual fear of the saber-toothed tiger. Nowadays our enemy seems to be the very civilization we live in. The individual who finds it hard to keep up with today's pace of life runs more risk than the person who adapts to this pace.

Blood pressure—The coronary risk of a person with high blood pressure is much greater than the risk of a person with normal blood pressure. The risk is increased further if the person is also overweight.

Diabetes—Diabetic persons have increased risk, whether the diabetes develops early or later in life.

Overweight—This may be important because of its frequent association with high blood pressure and with diabetes. People who have gained weight as adults seem more likely to develop coronary disease than those who are overweight throughout life.

Lack of exercise—A sedentary person, such as an office worker, is more likely to suffer from heart disease than one whose life is more active. Inactivity also tends to increase body weight.

Blood cholesterol—Raised levels of the fat-like substance, cholesterol, in the blood have been associated with increased likelihood of coronary disease.

Blood triglyceride—Raised levels of the blood fat, triglyceride, are also related to increased likelihood of coronary disease.

Diet—The quality and quantity of food eaten may be related to the development of coronary disease. However, the exact nature of a "risky" diet is a matter of confusion and controversy.

We don't know the importance of diet compared to other risk factors. But the thought that coronary heart disease may be caused by eating the wrong food appeals to this nutrition-conscious nation. Diet is "news." It has become a sensational topic in the press and on television. What do we really know about it?

Let's take a closer look at diet and heart disease. . . .

The Diet Debate

Cholesterol is a risk factor under close examination. It is a fat-like substance found in all parts of the body. In the diet it is obtained from foods of animal origin. It is also made in the body.

We cannot live without cholesterol — it is essential to the structure of every cell in the body. It is one of a group of chemicals called *steroids*. The body's important *steroid hormones* are made from cholesterol.

Can cholesterol be harmful? A raised level of cholesterol in the blood is one of the risk factors associated with coronary heart disease. Cholesterol is also one of the substances that accumulate in the artery in atherosclerosis. Perhaps for these reasons, the word "cholesterol" commonly arouses a chill of fear.

Many puzzling problems about cholesterol still remain to be explained. Does raised blood cholesterol cause atherosclerosis? Does cholesterol affect the development of blood clots? Coronary heart disease is known to occur even when blood cholesterol is normal or low.

What causes high blood cholesterol? We need to know whether raised blood cholesterol level is a *cause* of coronary heart disease. It is possible that raised cholesterol is a *symptom*—just as spots are a symptom of measles. There are, for instance, several known disorders of the blood where raised cholesterol is a side effect.

Cholesterol level in the blood seems to depend on several factors. Among these factors are genetic or family tendency, the amount of cholesterol in the diet, and also the kind of fat in the diet.

This is one of the ways our diet may be involved with heart disease.

Fat in our diet comes from two sources: *visible fat* — such as fat meat, cooking fat, butter and margarine, and *invisible fat* — in foods such as lean meat, milk, eggs. Fat is a concentrated energy source, giving us about 40 percent of our calories. It also carries important nutrients — vitamins A, D, E and K. Some fats provide essential fatty acids. Much of the enjoyment and satisfaction we get from food is due to the fat it contains, or the fat used in cooking.

About 15 years ago, researchers showed that some countries consuming large amounts of fat also had high death rates among men in their 50's. (Men of this age group are especially prone to deaths from coronary disease.) Attention was thus drawn to fat in the diet.

Population statistics cannot show cause and effect, but only associations. Countries where

fat is a large part of the diet, are rich countries, and as we have seen, there are many other differences in their ways of life that could be associated with coronary heart disease. For instance, there is a statistical association between coronary heart disease and the number of television sets in the population! It is also interesting that these rich countries with high fat consumption have the greatest overall life expecancy on earth.

How might fat be important in heart disease? There are two basic kinds of fat. *Saturated* fats are usually solid at room temperature and are found mostly in animal foods. *Unsaturated* fats are usually liquid at room temperature and are found mostly in vegetable foods. Highly unsaturated fats are called *polyunsaturated* fats.

Saturated fats tend to raise blood cholesterol level, while polyunsaturated fats tend to lower it. From this evidence alone, many people including some physicians and scientists, recommend changing the type of fat in everyone's diet. They hope that substituting polyunsaturated fats for saturated fats in the diet will lower blood cholesterol and thereby reduce risk of heart attack.

Are polyunsaturated fats desirable? So far, we know that inclusion of large amounts of polyunsaturated fats in the diet can lower blood cholesterol. But there is no conclusive evidence that risk of heart attack can also be reduced. Perhaps time will tell. Over the last 25 years, we have been buying more polyunsaturated fats instead of saturated fats. However, there has been no corresponding decline in coronary heart disease, as might have been hoped.

We don't know yet the possible long-term effects of eating large amounts of polyunsaturated fats. Research has shown, for example, that lowering cholesterol in the blood may just move it to another part of the body, such as the liver or skin. Much more research is needed before we can determine the full effect of polyunsaturates on the body.

We often get the impression from newspapers and magazines that saturated and polyunsaturated fats are bad guys and good guys, as if the case were proven. In the excitement of finding a "solution," we must remember that firm proof is still not available.

Meanwhile, research continues into other aspects of diet. . . .

Carbohydrate is another source of energy in the diet. Like fat, there is more than one kind of carbohydrate, such as starch and sugars. One kind of sugar in particular, *sucrose* (ordinary cane sugar) is thought by some to be related to coronary heart disease.

Sugar has attracted interest because its consumption has more than doubled since the turn of the century. This is a period in which there has been a great increase in deaths from heart disease. Again we cannot prove a cause and effect with these statistics, as our pattern of life has changed in so many other ways during this time.

How might sugar be important in heart disease? One of the coronary risk factors is a raised level of the fat *triglyceride*, in the blood. If sugar is eaten in amounts not needed for energy, it is turned into triglyceride in the body. Sugar may raise blood triglyceride, just as saturated fat tends to raise blood cholesterol. However, more research on this is needed.

Investigation of carbohydrate in the diet is still a relatively new approach to studying coronary heart disease. Unlike cholesterol, triglyceride has not often been headline news. It would be just as mistaken at this stage to draw definite conclusions about sugar. However, this new evidence reminds us that we should keep an open mind about both saturated fats and sugar.

Single dietary components may be less important than other diet-related factors. . . .

Total calories in the diet may be related to coronary heart disease. Calories are the units in which energy value of the diet is measured. If more calories are consumed from food than are used up by physical activity, the extra calories are stored as fat, and a person may become overweight.

Overweight is associated with higher death rates from a number of causes. It is also a coronary risk factor. Overweight is often associated with other risk factors—diabetes, high blood pressure, raised blood cholesterol and raised blood triglyceride. Diet and inactivity act together to increase body weight, and it is difficult to know if one is more important than the other.

Can exercise help? Physical activity is beneficial as part of a weight control program. It may also have other benefits in reducing coronary risk. Regular exercise improves blood circulation in the whole body, including blood flow to the heart muscle. Blood cholesterol and triglyceride both tend to be lowered by sustained activity, and the tendency of the blood to clot is also reduced.

Meal patterns have changed over the last few decades. They seem to be of importance in addition to the kind and amount of food eaten. For instance, a harassed businessman today tends to eat little or no breakfast, a light hurried lunch and a large evening meal. Blood triglyceride is known to rise after eating a large quantity of food. Perhaps the body is not equipped to deal with the amount of food in a four-course dinner all at once, and converts it to fat (triglyceride) as an emergency measure.

Should I make changes in my diet? This is a difficult question. We still don't understand the role of diet and other risk factors in coronary heart disease. And in spite of volumes of research, we don't know enough about the importance of what we eat, how much we eat and when we eat.

Scientists and medical authorities disagree among themselves about what to recommend. Some consider that changes in the diet are already justified. There are those, too, who prefer to wait for more conclusive evidence.

Moderation seems to be the wisest course of action at the present time. This view is taken by the Food and Nutrition Board, National Academy of Sciences-National Research Council:

"In spite of the large amount of information accumulated in recent years about atherosclerosis and its pathogenesis, many gaps in knowledge remain. Results of recent studies, while valuable and thought provoking, do not provide sufficient data for firm recommendations for radical dietary changes. . . .

"Until we learn more about which fats are desirable nutritionally, the Board recommends that the American consumer should partake of the foods that make up a varied, adequate and not overly rich diet and maintain a normal body weight by judicious control of caloric intake and by daily exercise."

What is a good, moderate diet? We need to eat a good diet to be provided with all the nutrients essential for health. Each nutrient has certain special jobs in building, upkeep and operation of the body. Having an extra supply of one nutrient cannot make up for a shortage of another.

No single food contains a perfect balance of nutrients. But there are many kinds and combinations of food that will provide all the nutrients we need. A moderate diet is one where extremes are avoided; *variety in food is the key to good nutrition.*

Foods which supply important amounts of the same nutrients can be grouped together. The *four food groups* is a simple guide to planning nutritious meals and snacks. Here are the amounts recommended for an adult every day:

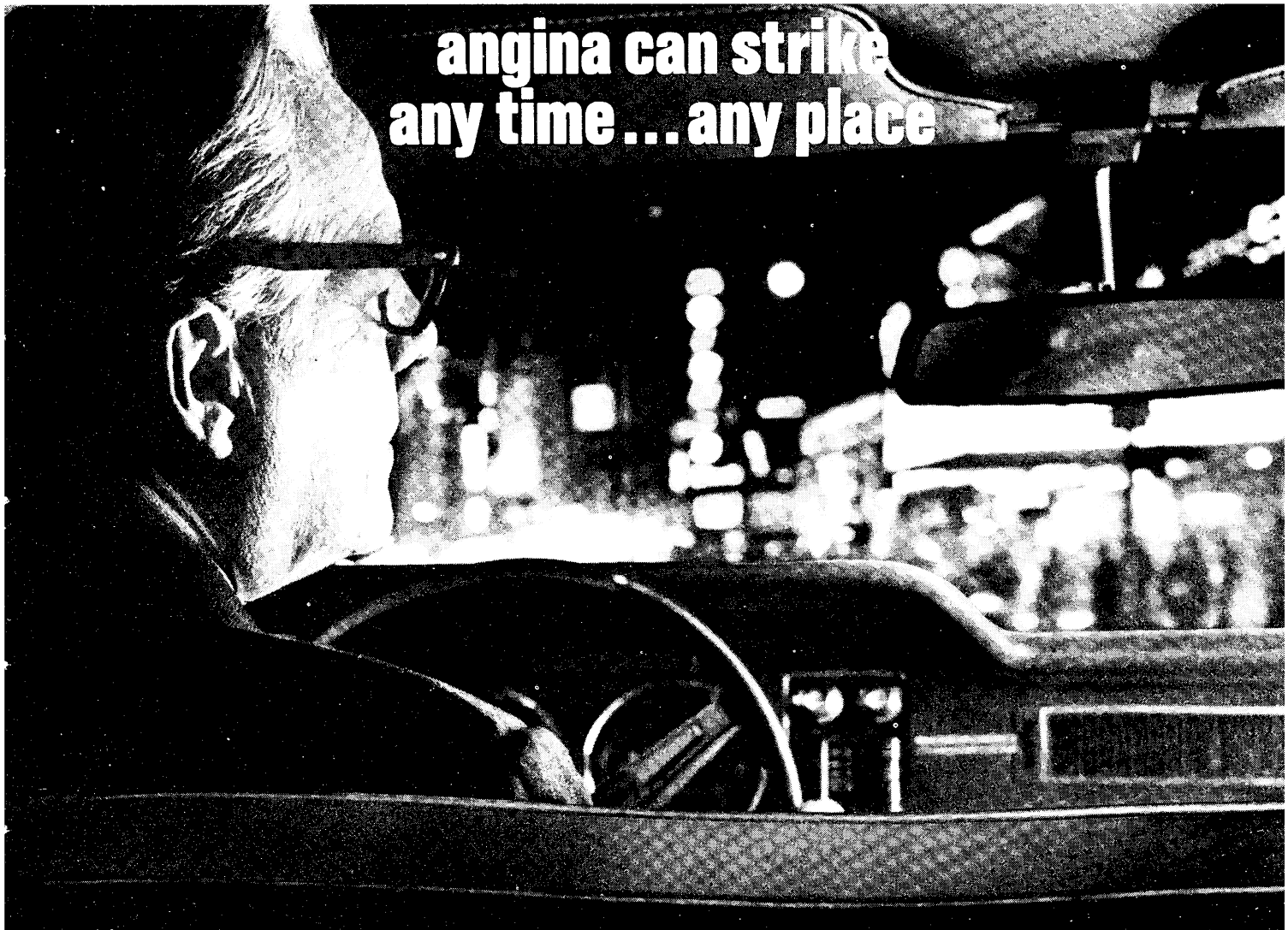
Milk Group — 2 or more glasses of milk. Cheese, cottage cheese, ice cream, and foods made with milk can be used as part of the milk allowance.

Meat Group — 2 or more servings. Eggs, poultry, fish, nuts, peanut butter, dried peas and dried beans (including baked beans) are also part of this group.

Fruit and vegetables — 4 or more servings. A citrus fruit, cantaloupe, strawberries or tomato should be one of the servings. Dark green or deep yellow vegetables or yellow fruits should be eaten at least every other day.

Bread and cereals—4 or more servings. This group includes whole grain or enriched bread, rolls, macaroni, spaghetti, ready-to-eat cereals, rice, tortillas.

Eating these foods every day is one way you can benefit your general health, and perhaps your heart too. But diet alone may not be enough. Cigarette smoking, inactivity and stress can also affect your chances of coronary heart disease.



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CONTRAINDICATION: Idiosyncrasy to this drug.

WARNING: Data supporting the use of nitrites during the early days of the acute phase of myocardial infarction (the period during which clinical and laboratory findings are unstable) are insufficient to establish safety.

PRECAUTIONS: Intraocular pressure is increased; therefore, caution is required in administering to patients with glaucoma. Tolerance to this drug and cross-tolerance to other nitrites and nitrates may occur. In patients with functional or organic gastrointestinal hypermotility or malabsorption syndrome, it is suggested that either the ISORDIL ORAL 5 mg. or ISORDIL 10 mg. oral tablet or ISORDIL SUBLINGUAL be the preferred therapy. The reason for this is that a few patients have reported passing partially dissolved ISORDIL TEMBIDS in their stools. This phenomenon is believed to be on the basis of physiologic variability and to reflect rapid gastrointestinal transit of the sustained action tablet. *ISORDIL TEMBIDS should not be chewed.*

ADVERSE REACTIONS: Cutaneous vasodilation with flushing. Headache is common and may be severe and persistent. Transient episodes of dizziness and weakness as well as other signs of cerebral ischemia associated with postural hypotension may occasionally develop. This drug can act as a physiological antagonist to norepinephrine, acetylcholine, histamine, and many other agents. An occasional individual exhibits marked sensitivity to the hypotensive effects of nitrite, and severe responses (nausea, vomiting, weakness, restlessness, pallor, perspiration and collapse) can occur even with the usual therapeutic dose. Alcohol may enhance this effect. Drug rash and/or exfoliative dermatitis may occasionally occur.

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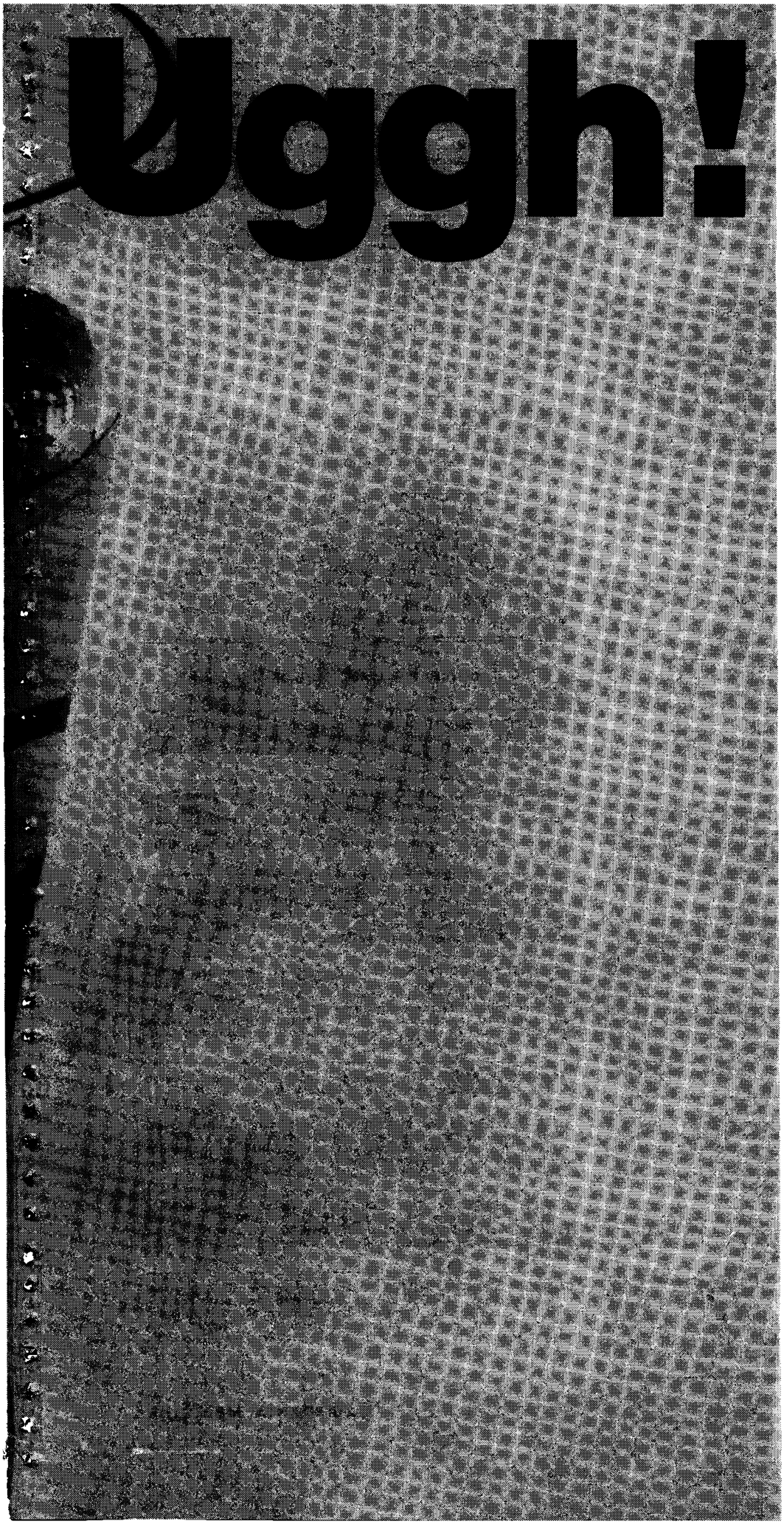

Potassium iodide is an outstanding mucolytic agent[1-4] that usually tastes like rust on the rocks. Iodo-Niacin is unusual.

Few would quarrel with the mucus-liquefying value of potassium iodide in acute and chronic bronchitis, asthma and emphysema. It's outstanding in freeing mucus plugs and strings. But the taste. Uggh! Give your patient Iodo-Niacin and you give him the iodide benefits without the iodide taste. Iodo-Niacin comes in taste-free tablets. Action is rapid and well-tolerated.[5,6] All that's missing is the uggh! Good riddance.

Iodo-Niacin® Each Slosol® coated tablet contains potassium iodide 135 mg. and niacinamide hydroiodide 25 mg.

RESPIRATORY DISEASE: The use of Iodo-Niacin is indicated whenever an expectorant action is desired to increase the flow of bronchial secretion and thin out tenacious mucus as seen in bronchial asthma, and other chronic pulmonary disease. Iodo-Niacin has also proven of value in sinusitis, bronchitis, bronchiectasis, and other chronic and acute respiratory diseases where the expectorant action of iodide is desired.

RATIONALE: The signs and symptoms of pellagra, bromism, and iodism are similar in many respects and have been postulated by some investigators to be caused by the same mechanism: poisoning of coenzymes I and II. These enzymes are vital to cellular oxidative metabolism and are essential in the Krebs' cycle. Nicotinic acid is specific for the therapy of pellagra. Its use in the prevention or treatment of iodism follows from the above postulation: a source of replenishment of the pyridine ring structure in coenzymes I and II.

DOSAGE: THE ORAL DOSE FOR ADULTS IS TWO TABLETS AFTER MEALS TAKEN WITH A GLASS OF WATER. For children over eight years, one tablet after meals with water. The dosage should be individualized according to the needs of the patient on long-term therapy.

SIDE EFFECTS: Serious adverse side effects from the use of Iodo-Niacin are rare. Mild symptoms of iodism such as metallic taste, skin rash, mucous membrane ulceration, salivary gland swelling, and gastric distress have occurred occasionally. These generally subside promptly when the drug is discontinued. Pulmonary tuberculosis is considered a contraindication to the use of iodides by some authorities, and the drug should be used with caution in such cases. Rare cases of goiter with hypothyroidism have been reported in adults who had taken iodides over a prolonged period of time, and in newborn infants whose mothers had taken iodides for prolonged periods. The signs and symptoms regressed spontaneously after iodides were discontinued.

CAUTION: The causal relationship and exact mechanism of action of iodides of this phenomenon are unknown. Appropriate precautions should be followed in pregnancy and in individuals receiving Iodo-Niacin for prolonged periods.

SUPPLIED: Bottles of 100, 500 and 1,000 Slosol coated pink tablets.

REFERENCES: 1. Modell, W., ed., *Drugs of Choice*, 1968-1969, pg. 435. 2. Carryer, H. M., and Henderson, L. L.: *Postgrad. Med., 41*:612, 1967. 3. Wells. Jr., R. E.: *M. Clin. North America, 44*:5, 1960. 4. Richerson, H. B.: *Hospital Formulary Management*, (Sept.) 1967. 5. Stern, F. H:. *Psychosomatics*, Aug. 15, 1968. 6. Abrahamson, Jr., I. A., *et al.: E.E.N.T. Dig.*, July, 1968.

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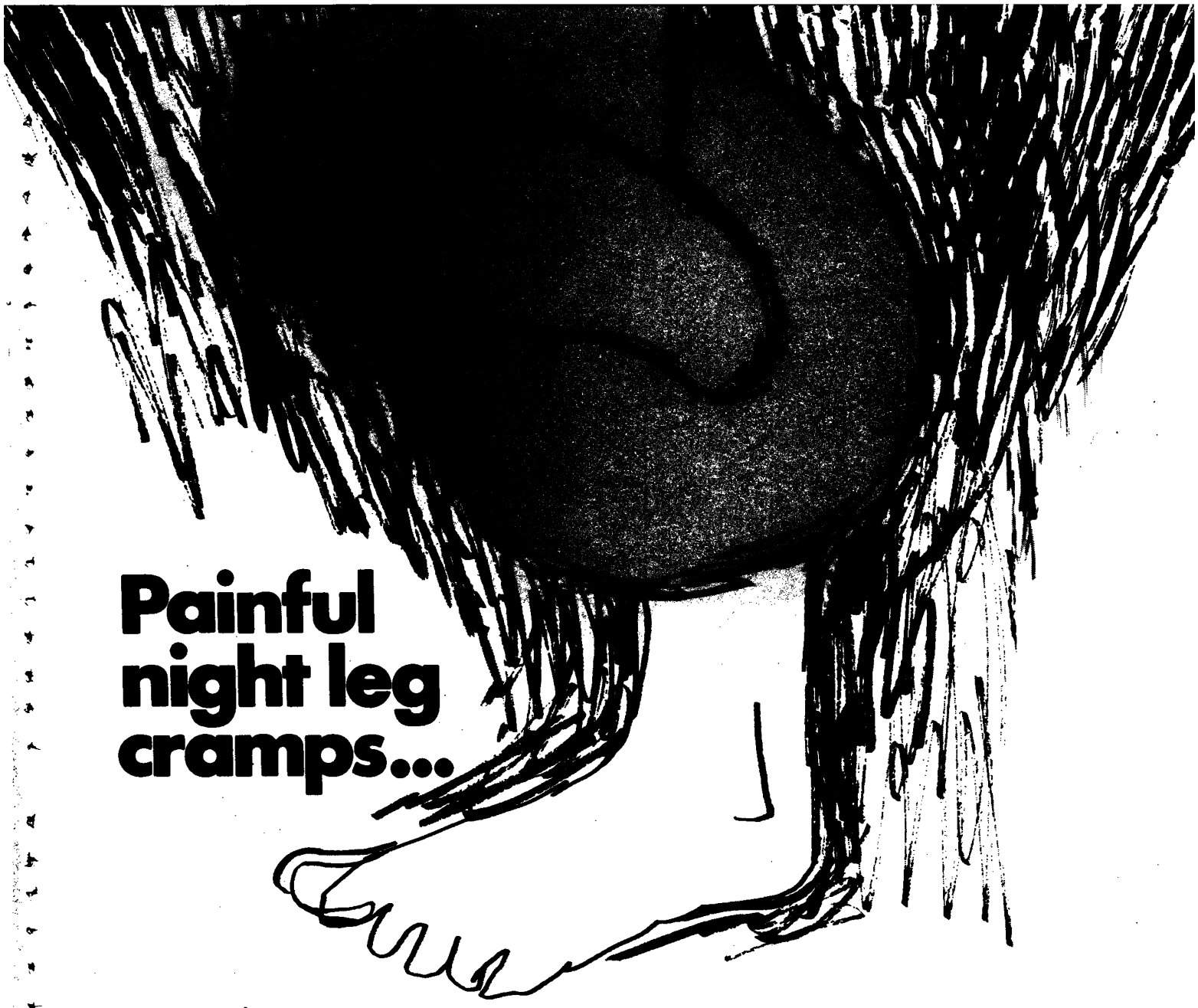
(Continued on Page 52)



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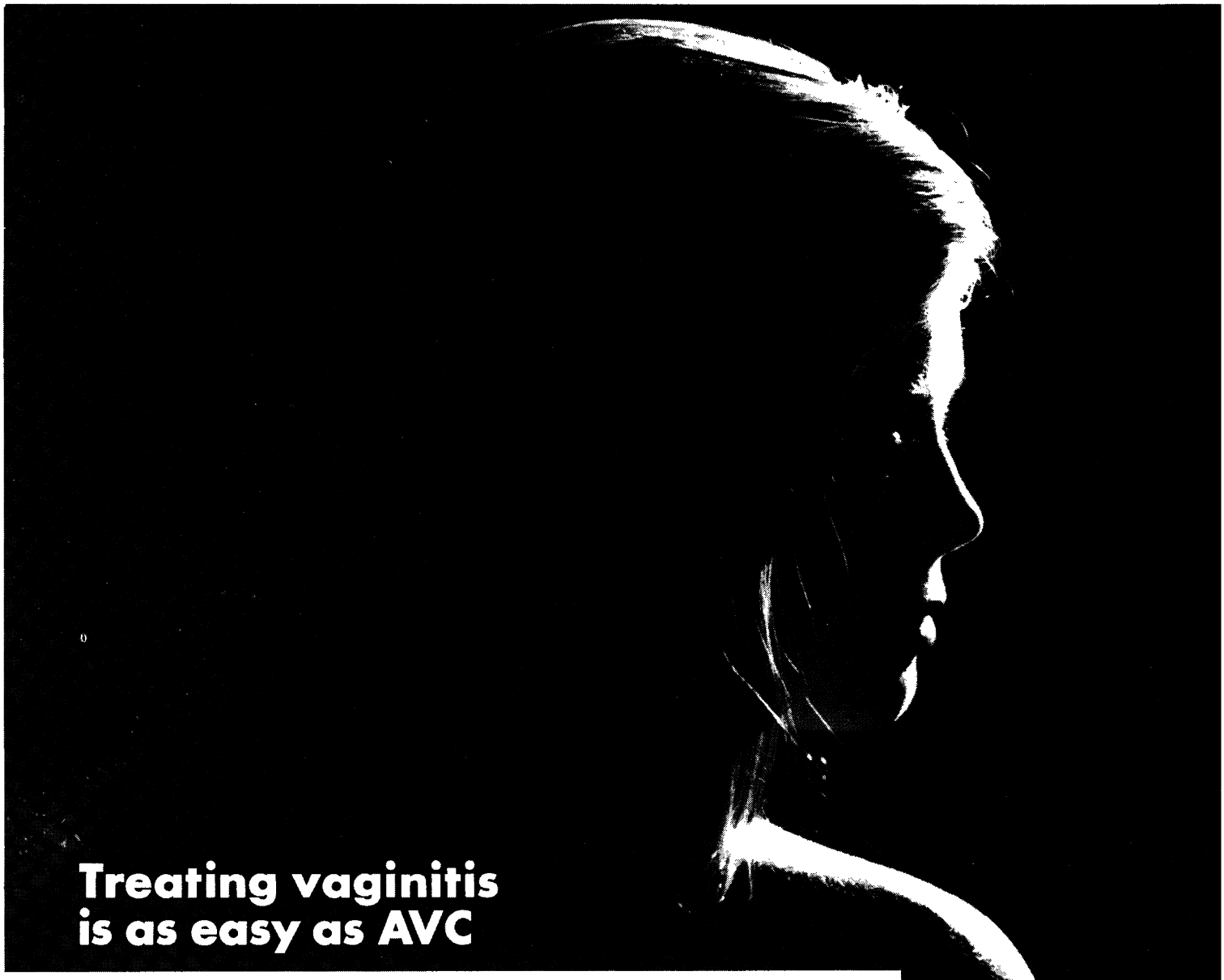

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Dosage: One applicatorful or one suppository intravaginally once or twice daily.
Supplied: Cream—Four-ounce tube with or without applicator. Suppositories—Box of 12 with applicator.

References: 1. Gardner, H. L.: J. Miss. M.A. 8:529, 1967. 2. Porter, P. S., and Lyle, J. S.: Arch. Dermat. 93:402, 1966. 3. Walsh, H.; Hildebrandt, R. J., and Prystowsky, H.: Am. J. Obst. & Gynec. 93:904, 1965. 4. Vaginitis and the Pill: J.A.M.A. 196:731, 1966. 5. Guerriero, W. F.: South. M.J. 56:390, 1963. 6. Seelig, M. S.: Am. J. Med. 40:887, 1966. 7. To-day's Drugs, New York, Grune & Stratton, Inc., 1965, p. 316. 8. Gray, L. A., and Barnes, M. L.: Am. J. Obst. & Gynec. 92:125, 1965. 9. Salerno, L. J.; Ortiz, G., and Turkel, V.: Vaginitis: A Diagnostic and Therapeutic Approach, Scientific Exhibit, presented at the 115th Annual A.M.A. Convention, Chicago, Illinois, June 1966. 10. Walsh, J. C.; Sheffery, J. B., and Wilson, T. A.: Med. Ann. D.C. 37:358, 1968. 11. Nugent, F. B., and Myers, J. E.: Pennsylvania Med. 69:44, 1966.

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON MERRELL INC.
PHILADELPHIA, PENNSYLVANIA 19144

AVC CREAM (aminacrine hydrochloride 0.2%, sulfanilamide 15.0%, allantoin 2.0%)

AVC SUPPOSITORIES (aminacrine hydrochloride 0.014 Gm., sulfanilamide 1.05 Gm., allantoin 0.014 Gm.)

AV-919A 7/69

lubadub lubadub

His heart tells
You know he's **invalid.**

Contraindications: History of sensitivity to meprobamate.

Important Precautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use has been reported to result in dependence or habituation in susceptible persons, as alcoholics, ex-addicts, and other severe psychoneurotics. After prolonged excessive dosage, reduce dosage gradually to avoid possibly severe withdrawal reactions. Abrupt discontinuance of excessive doses has sometimes resulted in epileptiform seizures.

Warn patients of possible reduced alcohol tolerance, with resultant slowing of reaction time and impairment of judgment and coordination.

Reduce dose if drowsiness, ataxia or visual disturbance occurs; if persistent, patients should not operate vehicles or dangerous machinery.

Side Effects include drowsiness, usually transient; if persistent and associated with ataxia, usually responds to dose reduction; occasionally concomitant CNS stimulants (amphetamine, mephentermine sulfate) are desirable. Allergic or idiosyncratic reactions are rare, but such reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Previous history of allergy may or may not be related to incidence of reactions. Mild reactions are characterized by itchy urticarial or erythematous maculopapular rash, generalized or confined to groin. Acute nonthrombocytopenic purpura with cutaneous petechiae, ecchymoses, peripheral edema and fever have been reported. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. If allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Treat symptomatically as with epinephrine, antihistamine and possibly hydrocortisone. Aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia have occurred rarely, almost always in presence of known toxic agents. A few cases of leukopenia, usually transient, have been reported on continuous administration.

Meprobamate may sometimes precipitate grand mal attacks in patients susceptible to both grand and petit mal. Extremely large doses can produce rhythmic fast activity in the cortical pattern. Impairment of accommodation and visual acuity has been reported rarely. After excessive dosage for weeks or months, withdraw gradually (1 or 2 weeks) to avoid recurrence of pretreatment symptoms (insomnia, severe anxiety, anorexia). Abrupt discontinuance of excessive doses has sometimes resulted in vomiting, ataxia, tremors, muscle twitching and epileptiform seizures. Prescribe very cautiously and in small amounts for patients with suicidal tendencies. Suicidal attempts have resulted in coma, shock, vasomotor and respiratory collapse and anuria. Excessive doses have resulted in prompt sleep; reduction of blood pressure, pulse and respiratory rates to basal levels; and occasionally hyperventilation. Treat with immediate gastric lavage and appropriate symptomatic therapy. (CNS stimulants and pressor amines as indicated.) Doses above 2400 mg./day are not recommended.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. (All tablets also available in REDIPAK® [strip pack], Wyeth.) Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

Wyeth Laboratories Philadelphia, Pa.

lubadubdub lubadu

Anxiety is expected in the cardiovascular patient. A little may even be desirable.

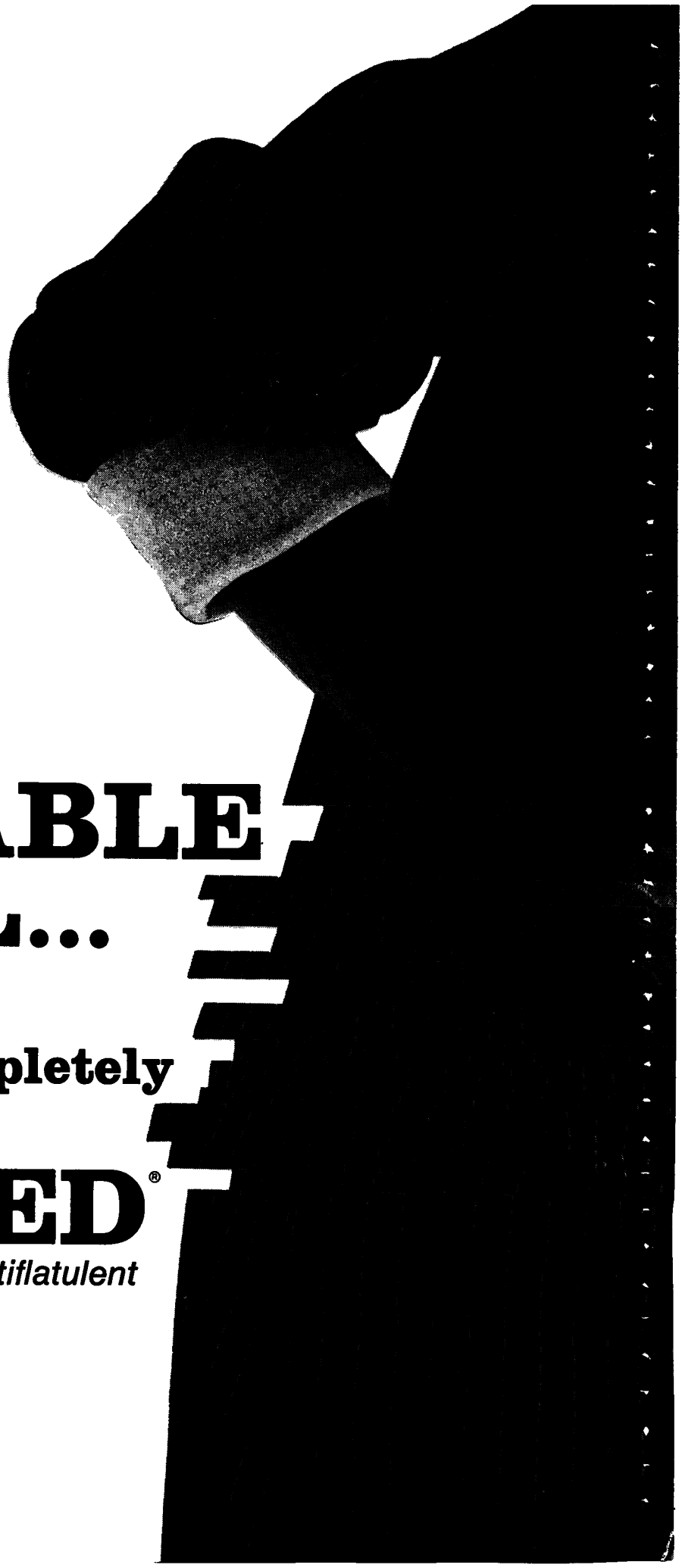
But when anxiety is exaggerated . . . when it interferes with sleep . . . when it aggravates cardiovascular symptoms, your help may be needed.

Naturally, you'll want to reassure the patient.

And perhaps prescribe Equanil (meprobamate) as adjunctive therapy. It helps relieve anxiety and tension specifically, yet gently.

Almost 15 years' use has shown that Equanil is usually well tolerated as well as effective. Side effects are generally limited to transient drowsiness; serious, therapy-interrupting side effects are rare.

Equanil®
(meprobamate) Wyeth



IRRITABLE BOWEL...

Now...more completely controlled with

KINESED®

antispasmodic/sedative/antiflatulent

KINESED®

□ With belladonna alkaloids—for the hyperactive and spastic bowel

□ With phenobarbital—for associated anxiety and tension

□ With simethicone—for accompanying gas discomfort

Composition
Each chewable, fruit-flavored, scored tablet contains: 16 mg. phenobarbital (warning: may be habit-forming); 0.1 mg. hyoscyamine sulfate; 0.02 mg. atropine sulfate; 0.007 mg. scopolamine hydrobromide; 40 mg. simethicone.

Contraindications
Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.

Precautions
Administer with caution to patients with incipient glaucoma, bladder neck obstruction. Prolonged use of barbiturates may be habit-forming.

Side effects
Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.

Dosage
Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms. Children 2 to 12 years: One half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.

Stuart

Division/Pasadena, Calif. 91109
ATLAS CHEMICAL INDUSTRIES, INC.

in active stages of moderate to severe rheumatoid arthritis,

What more can you

after you've tried

rheumatoid spondylitis, and osteoarthritis of the hip

do for these patients?

salicylates and rest

INDOCIN®

(INDOMETHACIN | MSD)

helps relieve pain, fever, swelling, and tenderness

Please see new prescribing information on following page.

REVISED PRESCRIBING INFORMATION

IMPORTANT NOTE: INDOCIN (Indomethacin, MSD) cannot be considered a simple analgesic and should not be used in conditions other than those recommended under Indications. The drug should not be prescribed for children because safe conditions for use have not been established.

General Adverse Effects: Because of the high potency of the drug and the variability of its potential to cause adverse reactions, the following are strongly recommended: 1) the lowest possible effective dose for the individual patient should be prescribed. Increased dosage tends to increase adverse effects, particularly in doses over 150-200 mg/day, without corresponding clinical benefits; and 2) careful instructions to, and observations of, the individual patients are essential to the prevention of serious and irreversible, including fatal, adverse reactions, especially in the aging patient.

Indications: Symptomatic relief of adult rheumatoid and degenerative joint disease unresponsive to adequate trial of salicylates and other measures of established value, such as appropriate rest. Has been found effective in active stages of: 1) moderate to severe rheumatoid arthritis including acute flares of chronic disease, 2) moderate to severe rheumatoid (ankylosing) spondylitis, and 3) moderate to severe degenerative joint disease of the hip (osteoarthritis of the hip). Has been found effective in relieving pain and reducing fever, swelling, and tenderness in acute gouty arthritis in selected patients. May enable reduction of steroid dosage in patients receiving steroids for the more severe forms of rheumatoid arthritis; in such instances the steroid dosage should be reduced slowly and the patients followed very closely for any possible adverse effects.

Contraindications: Children 14 years of age and under; pregnant women and nursing mothers; active gastrointestinal lesions or history of recurrent gastrointestinal lesions; allergy to aspirin and indomethacin.

Warnings: *Gastrointestinal Effects:* Because of the occurrence and, at times, severity of gastrointestinal reactions, be continuously alert for any sign or symptom signaling a possible gastrointestinal reaction. The risks of continuing therapy with INDOCIN in the face of such symptoms must be weighed against the possible benefits to the individual patient. Gastrointestinal effects may be reduced by giving the drug immediately after meals, with food, or with antacids. Use greater care in aging patients.
Ocular Effects: Corneal deposits and retinal disturbances, including those of the macula, have been observed in some patients on prolonged therapy. Discontinue therapy if such changes are observed. Ophthalmologic examination at periodic intervals is desirable in patients on prolonged therapy.
Central Nervous System Effects: INDOCIN (Indomethacin, MSD) may aggravate psychiatric disturbances, epilepsy, and parkinsonism, and should be used with considerable caution in patients with these conditions. If severe CNS reactions develop, discontinue the drug.

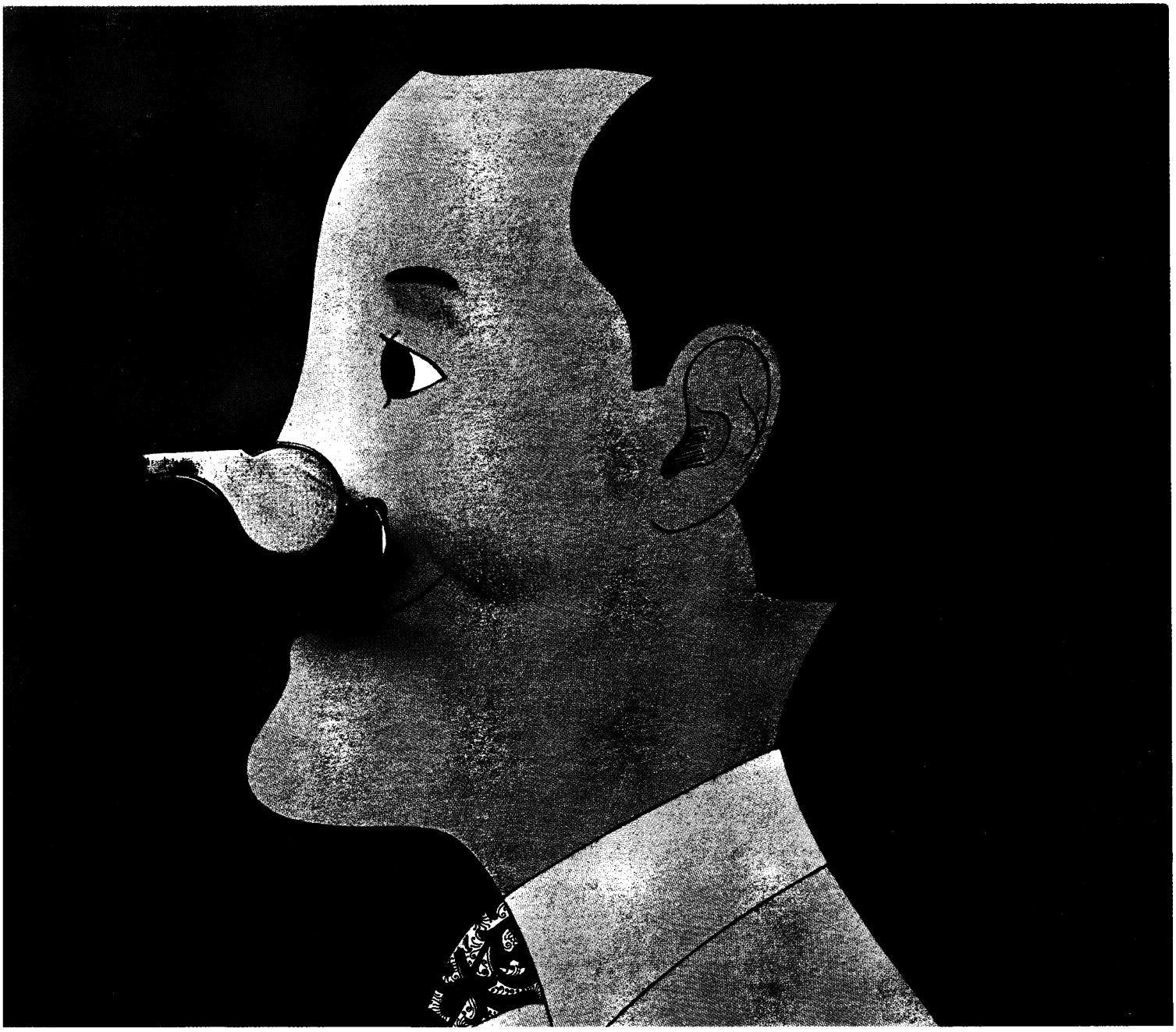
Precautions: Blurred vision may be a significant symptom that warrants a thorough ophthalmologic examination. Patients should be cautioned about engaging in activities requiring mental alertness and motor coordination, as driving a car. Headache which persists despite dosage reduction requires complete cessation of the drug. May mask the usual signs and symptoms of infection; therefore, the physician must be continually on the alert for this and should use the drug with extra care in the presence of existing controlled infection. After the acute phase of the disease is under control, an attempt to reduce the daily dose should be made repeatedly until the patient is off entirely.

Adverse Reactions: *Gastrointestinal Reactions:* Single or multiple ulcerations of the esophagus, stomach, duodenum, or small intestine, including perforation and hemorrhage, with fatalities in some instances; gastrointestinal bleeding without obvious ulcer formation; perforation of preexisting sigmoid lesions (diverticulum, carcinoma, etc.); rarely, increased abdominal pain in ulcerative colitis patients or development of ulcerative colitis and regional ileitis; gastritis, which may persist after the cessation of the drug; nausea, vomiting, anorexia, epigastric distress, abdominal pain, and diarrhea.
Eye Reactions: Corneal deposits and retinal disturbances, including those of the macula, have been observed on prolonged therapy; blurring of vision.
Hepatic Reactions: Rarely, toxic hepatitis and jaundice, including some fatal cases.
Hematologic Reactions: Aplastic anemia, hemolytic anemia, bone marrow depression, agranulocytosis, leukopenia, and thrombocytopenic purpura. Since some patients manifest anemia secondary to obvious or occult gastrointestinal bleeding, appropriate blood determinations are recommended.
Hypersensitivity Reactions: Acute respiratory distress, including dyspnea and asthma; angiitis; pruritus; urticaria; angioedema; skin rashes.
Ear Reactions: Hearing disturbances, deafness, tinnitus.
Central Nervous System Reactions: Psychotic episodes, depersonalization, depression, coma, convulsions, peripheral neuropathy, drowsiness, mental confusion, lightheadedness, dizziness, headache.
Cardiovascular-Renal Reactions: Edema, elevation of blood pressure, hematuria.
Dermatologic Reactions: Loss of hair, erythema nodosum.
Miscellaneous: Rarely, vaginal bleeding, hyperglycemia, glycosuria, ulcerative stomatitis, and epistaxis.

Supplied: Capsules containing 25 mg indomethacin each, in bottles of 100 and 1000; capsules containing 50 mg indomethacin each, in bottles of 100.

For more detailed information, consult your Merck Sharp & Dohme representative or see the package circular.

MERCK SHARP & DOHME | **where today's theory is tomorrow's therapy**
Division of Merck & Co., INC., West Point, Pa. 19486



Nose clear as a whistle

(THANKS TO DIMETAPP®)

Dimetapp Extentabs® does an outstanding job of helping to clear up the stuffiness, drip and congestion of colds and upper respiratory allergies and infections. Each Extentab keeps working up to 12 hours. And for most patients drowsiness or overstimulation is unlikely. Try Dimetapp. It clearly works.

FOR UPPER RESPIRATORY ALLERGIES AND INFECTIONS

Dimetapp Extentabs®

Dimetane® (brompheniramine maleate), 12 mg.; phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg.

UP TO 12 HOURS CLEAR BREATHING ON ONE TABLET

Indications: Dimetapp is indicated for symptomatic relief of the allergic manifestations of respiratory illnesses, such as the common cold and bronchial asthma, seasonal allergies, sinusitis, rhinitis, conjunctivitis, and otitis.
Contraindications: Hypersensitivity to antihistamines. Not recommended for use during pregnancy.
Precautions: Until patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension.
Side Effects: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia, have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability or excitement may be encountered.
Dosage: 1 Extentab morning and evening.
Supplied: Bottles of 100 and 500.

A.H. ROBINS COMPANY
RICHMOND, VA. 23220

A·H·ROBINS

Hasn't the driver had enough excitement for one day?

For the patient who has been through an accident, the worry and anxiety following the mishap may actually heighten the perception of pain. This is why there's a classic ¼ grain *sedative* dose of phenobarbital in Phenaphen with Codeine—to take the nervous "edge" off, so the rest of the formula can control the pain more effectively.

Driver Escapes Serious Injury When Truck Jackknifes

SHENANDOAH, JULY 16. Roger Sherman of Waynesboro suffered head lacerations but escaped serious injury when the tractor-trailer he was driving skidded on Deep Run Bridge and jackknifed. It took rescue workers thirty minutes to remove him from the cab which was dangling over the edge of the bridge. Sherman is resting comfortably in University Hospital where his condition is listed as satisfactory.

Frankhouser called my attenti

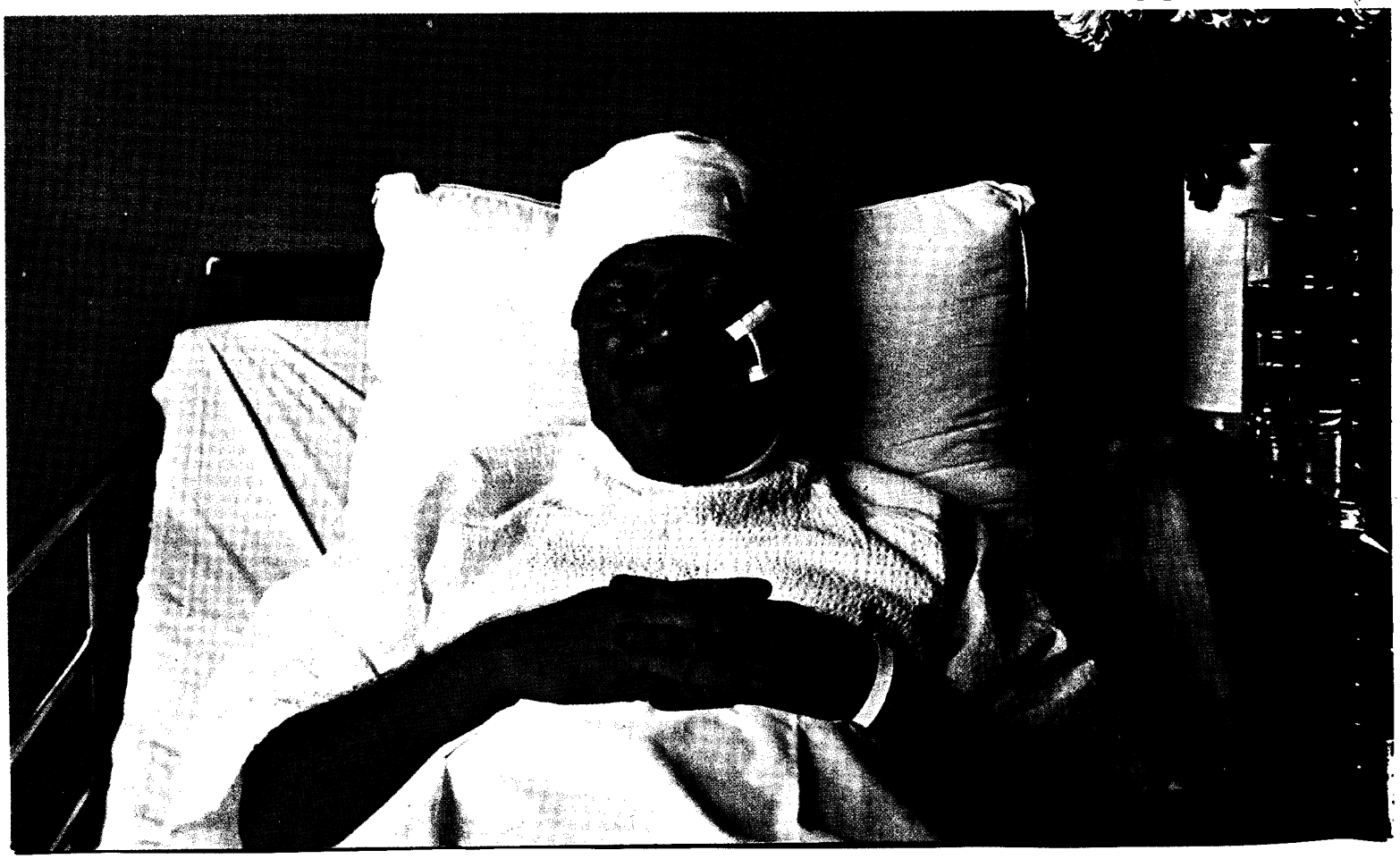
Phenaphen® with Codeine

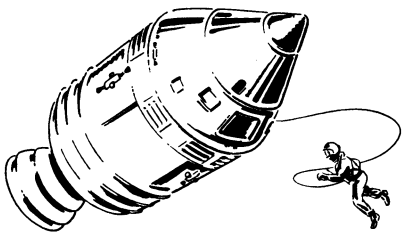
Phenaphen with Codeine Nos. 2, 3, or 4 contains: Phenobarbital (¼ gr.), 16.2 mg. (warning: may be habit forming); Aspirin (2½ gr.), 162.0 mg. Phenacetin (3 gr.), 194.0 mg.; Hyoscyamine sulfate, 0.031 mg. Codeine Phosphate, ¼ gr. (No. 2), ½ gr. (No. 3), or 1 gr. (No. 4) (warning: may be habit forming).

The compound analgesic that calms instead of caffeinates

Indications: Phenaphen with Codeine provides relief in severer grades of pain, on low codeine dosage, with minimal possibility of side effects. Its use frequently makes unnecessary the use of addicting narcotics. **Contraindications:** Hypersensitivity to any of the components. **Precautions:** As with all phenacetin-containing products excessive or prolonged use should be avoided. **Side effects:** Side effects are uncommon, although nausea, constipation and drowsiness may occur. **Dosage:** Phenaphen No. 2 and No. 3—1 or 2 capsules every 3 to 4 hours as needed; Phenaphen No. 4—1 capsule every 3 to 4 hours as needed. For further details see product literature.

A. H. Robins Company, Richmond, Va. 23220 A·H·ROBINS





Man in space, now fait accompli, re-emphasizes the importance of Uro-Phosphate therapy. Research into the effect of space travel on the astronaut reveals that weightlessness causes loss of bone calcium. As the bones are required to bear less and less of the weight of the body they lose calcium, increasing the calcium content of the urine. When physical activity is reduced, the acidity of the urine should be adjusted to keep increased calcium in solution . . . . a prophylaxis to prevent kidney or bladder calculi.

Uro-Phosphate®

NOW A SUGAR-COATED TABLET

Each tablet contains: METHENAMINE, 300 mg.; SODIUM ACID PHOSPHATE, 500 mg.

Uro-Phosphate gives comfort and protection when inactivity causes discomfort in the urinary function. It keeps calcium in solution, preventing calculi; it maintains clear, acid, sterile urine; it encourages complete voiding and lessens frequency when residual urine is present.

Uro-Phosphate contains sodium acid phosphate, a natural urinary acidifier. This component is fortified with methenamine which is inert until it reaches the acid urinary bladder. In this environment it releases a mild antiseptic keeping the urine sterile.

Uro-Phosphate is safe for continuous use. There are no contra-indications other than acidosis. It can be given in sufficient amount to keep the urine clear, acid and sterile. A heavy sugar coating protects its potency.

Dosage:

For protection of the inactive patient 1 or 2 tablets every 4 to 6 hours is usually sufficient to keep the urine clear, acid and sterile.

2 tablets on retiring will keep residual urine acid and sterile, contributing to comfort and rest.

A clinical supply will be sent to physicians and hospitals on request.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23217

Manufacturers of Ethical Pharmaceuticals

relieved with MEASURIN® q. 8h. dosage

Double-strength Measurin timed-release aspirin offers a new kind of control for your arthritic patients. Each 10-grain tablet has over 6,000 microscopic reservoirs that release aspirin at a controlled rate—some right away and some later on. This means—fast relief, followed by long lasting relief. Throughout the day, Measurin gives your patients freedom from a 4-hour dosage schedule. Measurin can help your patients get a good night's sleep, uninterrupted by the need for an extra dose of aspirin. And, taken at bedtime, it also helps ease morning joint discomfort and stiffness.

For Professional Samples write:
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BREON **BREON LABORATORIES INC.**
90 Park Avenue, New York, N.Y. 10016
Subsidiary of Sterling Drug Inc.

MEASURIN®
TIMED-RELEASE ASPIRIN

ECONOMICAL • EFFECTIVE • LONG LASTING PAIN RELIEF
Dosage: 2 tablets followed by 1 or 2 tablets every 8 hours as required, not to exceed 6 tablets in 24 hours. For maximum nighttime pain relief and to help relieve early morning stiffness, 2 tablets at bedtime.
Available: Bottles of 12, 36 and 60 tablets.


Some days she can't seem
to function..

other days she doesn't even try

In the treatment of depression, Aventyl HCl as part of your total therapy often brings early symptomatic improvement. Aventyl HCl aids in renewing motor function and increasing interest in life. Patients may report that they eat more, enjoy undisturbed sleep . . . generally begin to function better. Relief from their most distressing symptoms helps them "open up" and ventilate their problems.

In depression

AVENTYL® HCl

NORTRIPTYLINE HYDROCHLORIDE

Description: Aventyl HCl is a safe and effective agent for treatment of mental depression, anxiety-tension states, and psychophysiological gastro-intestinal disorders. It is not a monoamineoxidase (MAO) inhibitor.

In laboratory animals, anticholinergic effects of Aventyl HCl are milder than those of related antidepressants.

Indications: Depressive reactions (alone or accompanied by anxiety) associated with such presenting symptoms as depression, anxiety, tension, insomnia, restlessness, disinterest, and irritability.

Psychophysiological gastro-intestinal disorders and symptomatic reactions in childhood (e.g., enuresis).

Contraindications: Hypersensitivity to the drug; concurrent use with a MAO inhibitor or use within two weeks after the MAO inhibitor is discontinued.

Warnings: Use in convulsive or hypotensive states should be closely followed by the physician.

At present, data are insufficient to recommend the drug during pregnancy. The possibility of a suicidal attempt in a depressed patient should always be considered.

There have been rare reports of agranulocytosis, jaundice, hypotension, tremor, urinary retention, thrombocytopenic purpura, and paralytic ileus. Periodic laboratory studies are recommended.

Cardiovascular complications, including myocardial infarction and arrhythmias, have been reported occasionally with related drugs. Patients with cardiovascular disease should be given Aventyl HCl under close observation and in low dosage. This drug, like members of its group, tends to produce sinus tachycardia and to prolong the conduction time, as manifested by first-degree AV block.

Precautions: Because of its anticholinergic activity, Aventyl HCl should be administered cautiously in patients with glaucoma or a propensity for urinary retention. Use Aventyl HCl with care in conjunction with sympathomimetic or anticholinergic drugs. Epileptiform seizures or troublesome patient hostility may occur. Aventyl HCl used alone in schizophrenic patients may result in an exacerbation of the psychosis.

Concomitant use of Aventyl HCl and ECT (with or without atropine, short-acting barbiturate, and muscle relaxant) has not been thoroughly studied. If these treatments are used together, the physician should be aware of possible added adverse effects.

Patients should be warned about the possibility of drowsiness if they operate dangerous machinery or drive a vehicle. Concurrent ingestion of other C.N.S. drugs or alcohol may potentiate the adverse effects of Aventyl HCl.

Patients receiving a tricyclic antidepressant (e.g., nortriptyline) may respond poorly to hypotensive agents such as guanethidine.

Adverse Reactions: The following have been observed or reported following the use of Aventyl HCl: dryness of mouth, drowsiness, constipation, dizziness, tremulousness, confusional state, ataxia, disorientation and hallucinations, restlessness, weakness, precipitation of hypomanic or manic state, tachycardia, blurred vision, epigastric distress, sweating, peculiar taste, blacktongue, fatigue, excess weight gain or weight loss, insomnia, headache, paresthesia, nausea and vomiting, adynamic ileus, rash, itching, delayed micturition, hunger sensation, flushing, diarrhea, nocturia, inner nervousness, anxiety and panic, ankle and orbital edema, hypotension, hypertension, impotence, nightmares, palpitation, numbness, peripheral neuropathy, photosensitization, extrapyramidal symptoms, and increased or decreased libido.

Habituation or withdrawal symptoms have not been reported.

Administration and Dosage: Aventyl HCl is administered orally as Pulvules® or liquid. Dosage should be individualized. The following general principles are applicable.

Aventyl HCl is preferably given in gradually increasing doses: 1 Pulvule (10 mg.) twice the first day, 1 Pulvule three times the second day, and 1 Pulvule four times daily thereafter.

If neither beneficial nor adverse effects are seen after five to seven days with 10 mg. four times a day, the patient can be given 25 mg. twice the first day, 25 mg. three times the second day, and 25 mg. four times daily thereafter.

If minor side-effects develop, reduce the dosage. If side-effects of a more serious nature or allergic manifestations develop, discontinue the drug.

For mild symptoms of a depressive nature, give 10 mg. three or four times a day; for severe depressions, 100 mg. daily.

Dosages above 100 mg. daily seem to induce no greater degree of clinical response, but side-effects may increase.

Usual Recommended Dosage

ADULTS—20 to 100 mg. daily

Pulvules: 25 mg.—1 Pulvule one to four times daily

10 mg.—1 or 2 Pulvules one to four times daily

Liquid: 1 to 2 teaspoonfuls (5 to 10 cc.) one to four times daily

CHILDREN—1 to 2 mg. per Kg. or 10 to 75 mg. daily

Pulvules: 25 mg.—Ages seven to twelve, 1 Pulvule one to three times daily

10 mg.—Ages three to six, 1 Pulvule one to three times daily

Ages seven to twelve, 1 or 2 Pulvules one to three times daily

Liquid: Ages three to six, 1 teaspoonful (5 cc.) one to three times daily

Ages seven to twelve, 1 to 2 teaspoonfuls (5 to 10 cc.) one to three times daily

Maintenance medication is necessary until it is evident that the depression cycle has run its spontaneous course. This assumption may be based upon the history of previous depressions, the removal of the precipitating factors in the environment, or a recognition that the patient is able to manage his affairs. It is advisable to continue maintenance therapy for several months after improvement.

How Supplied: Liquid Aventyl® HCl (nortriptyline hydrochloride, Lilly), 10 mg. (equivalent to base) per 5 cc., in pint bottles.

Pulvules Aventyl HCl, 10 and 25 mg. (equivalent to base), in bottles of 100 and 500. [08166BA]

Additional information available upon request.

Lilly

ELI LILLY AND COMPANY • INDIANAPOLIS, INDIANA 46206

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(Continued from Page 34)

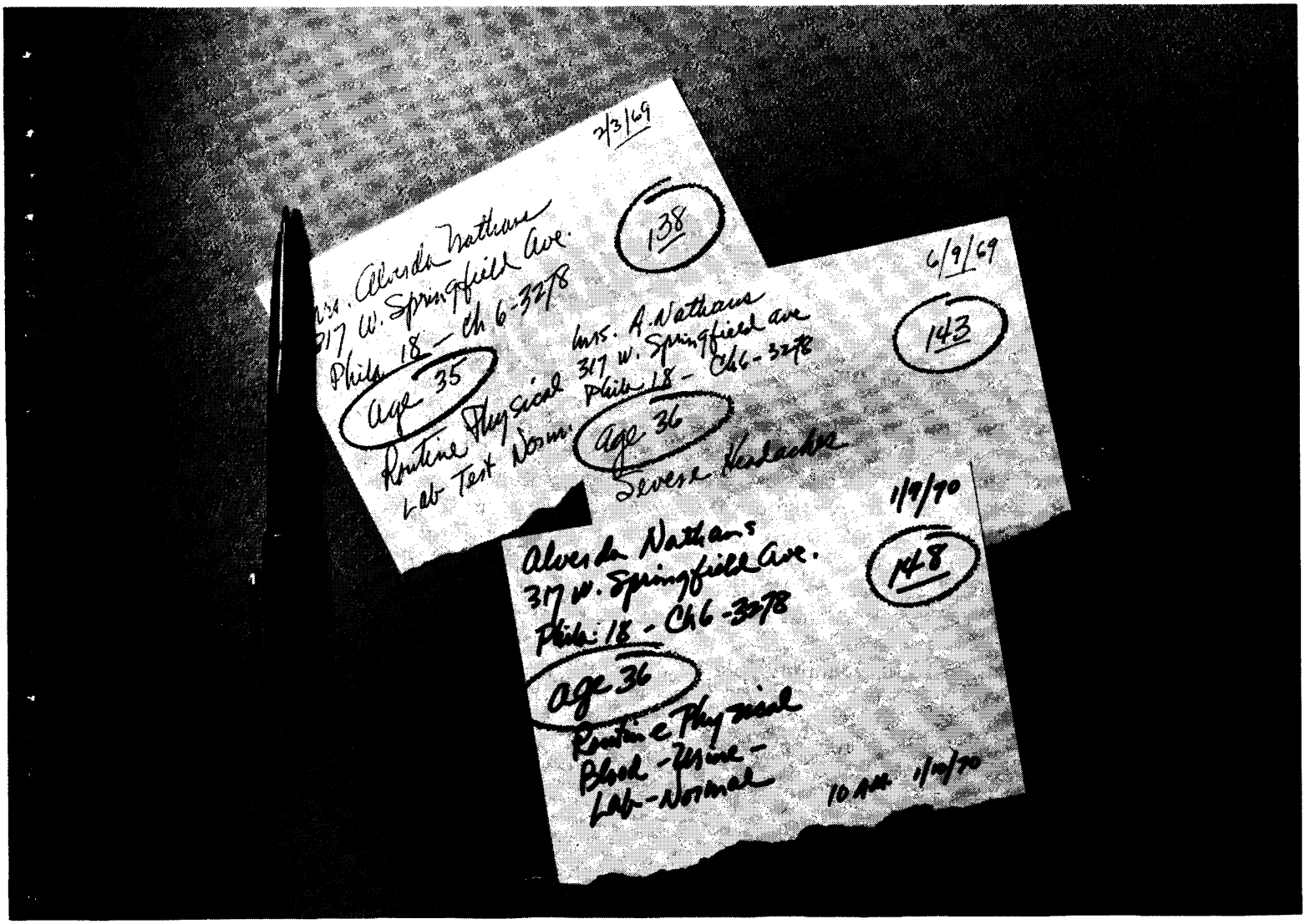
References and Reviews

Recognition of Unwanted Drug Effects — R. Doll (Medical Research Council Statistical Research Unit, 115 Gower St., London), Brit. Med. J. 2:69-75 (April 12) 1969.

Accounts are given of the evidence which led to the recognition of the unwanted side effects of thalidomide, the monoamine oxidase inhibitors, isoprenaline and orciprenaline in pressurized inhalers, oral contraceptives, and enteric-coated tablets of potassium chloride.

Transplacental Passage of Fetal Red Cells in Abortion—J. Katz (P.O. Box 1038, Johannesburg, South Africa), Brit. Med. J. 4:84-86 (Oct. 11) 1969.

Anti-D gamma globulin administered within 36 hours postpartum is regarded as preventive therapy of Rh disease. The frequency of fetal cells post-abortion, and the possibility of Rh sensitization were investigated. The Kleihauer-Betke acid elution technique was used to ascertain the fetal cell score. Normal pregnancies, and abortions prior to surgery, post-curettage, and post-curretage without oxytocic drugs were studied for minimal bleeding. Small risk of significant feto-maternal hemorrhage resulted from spontaneous abortions; however, a significant increase in the frequency of fetal cells was found post-curettage. In four of 81 patients, 0.2 ml to 0.4 ml of fetal blood was detected. In 15 Rh-negative subjects one multigravid patient was immunized. This dose of fetal blood is probably a "booster" dose to preformed antibody.



"When she's adding more pounds to more years"

. . . she may be ready for this 3-STEP PROGRAM:

1. Your supervision of a weight-loss regimen;
2. The Obedrin Menu Plan;
3. OBEDRIN-LA—for anorectic action.

By suppressing appetite and lifting mood, OBEDRIN-LA can appreciably reinforce your professional guidance and personal encouragement. OBEDRIN-LA is especially valuable early in the program, when physical and emotional resistance to change are often strongest.

DOSAGE: One tablet daily, usually at 10 a.m.

CAUTION: Obedrin-LA should not be given concurrently with monoamine oxidase inhibitors. It should be used with caution in patients having a sensitivity to sympathomimetic compounds or barbiturates and in cases of coronary or cardiovascular disease or severe hypertension. Excessive use of amphetamines by unstable individuals has been reported to result in a psychological dependence. In such cases, withdrawal of medication is necessary. All medication should be used with caution in pregnant patients, especially in the first trimester.

SIDE EFFECTS: Insomnia, excitability, nervousness may occur if dosage is excessive. These occur infrequently and are mild with the recommended dosage.

SUPPLY: In bottles of 50, 250 and 1000.

CAUTION: Federal law prohibits dispensing without prescription.

Obedrin®-LA

"TRICKLE-RELEASE" TABLETS

FORMULA: Each long-acting tablet contains Methamphetamine HCl, 12.5 mg.*; Pentobarbital; 50 mg.* (Barbituric Acid derivative; Warning: May be habit forming); Ascorbic Acid, 200 mg.; Thiamine Mononitrate, 1 mg.; Riboflavin, 2 mg.; Niacin, 10 mg.

*Provides prolonged effect over a period up to 8 to 10 hours.

SEMED *Pharmaceuticals* DIVISION OF THE S. E. MASSENGILL COMPANY, BRISTOL, TENN. 37620

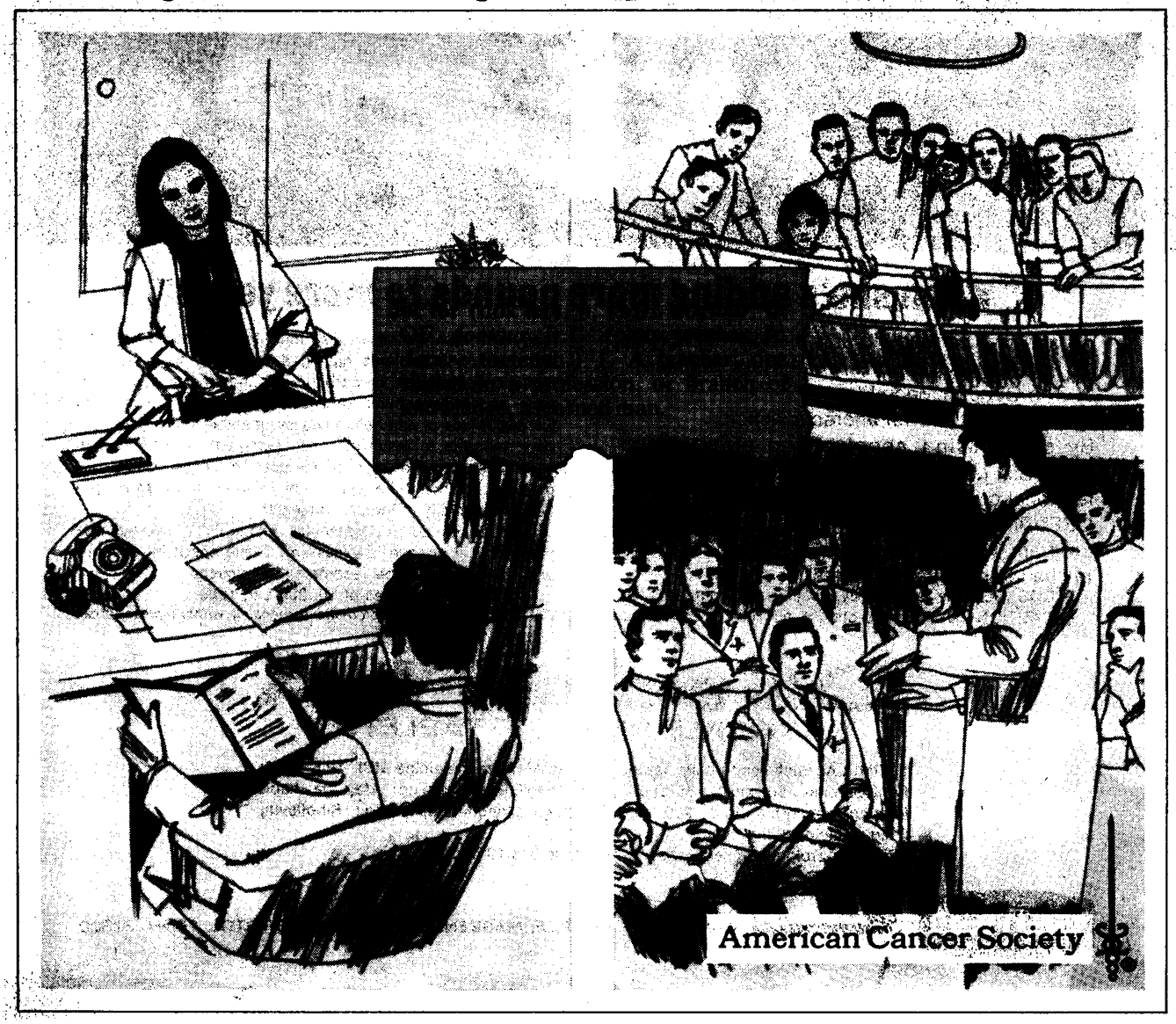
The Doctor

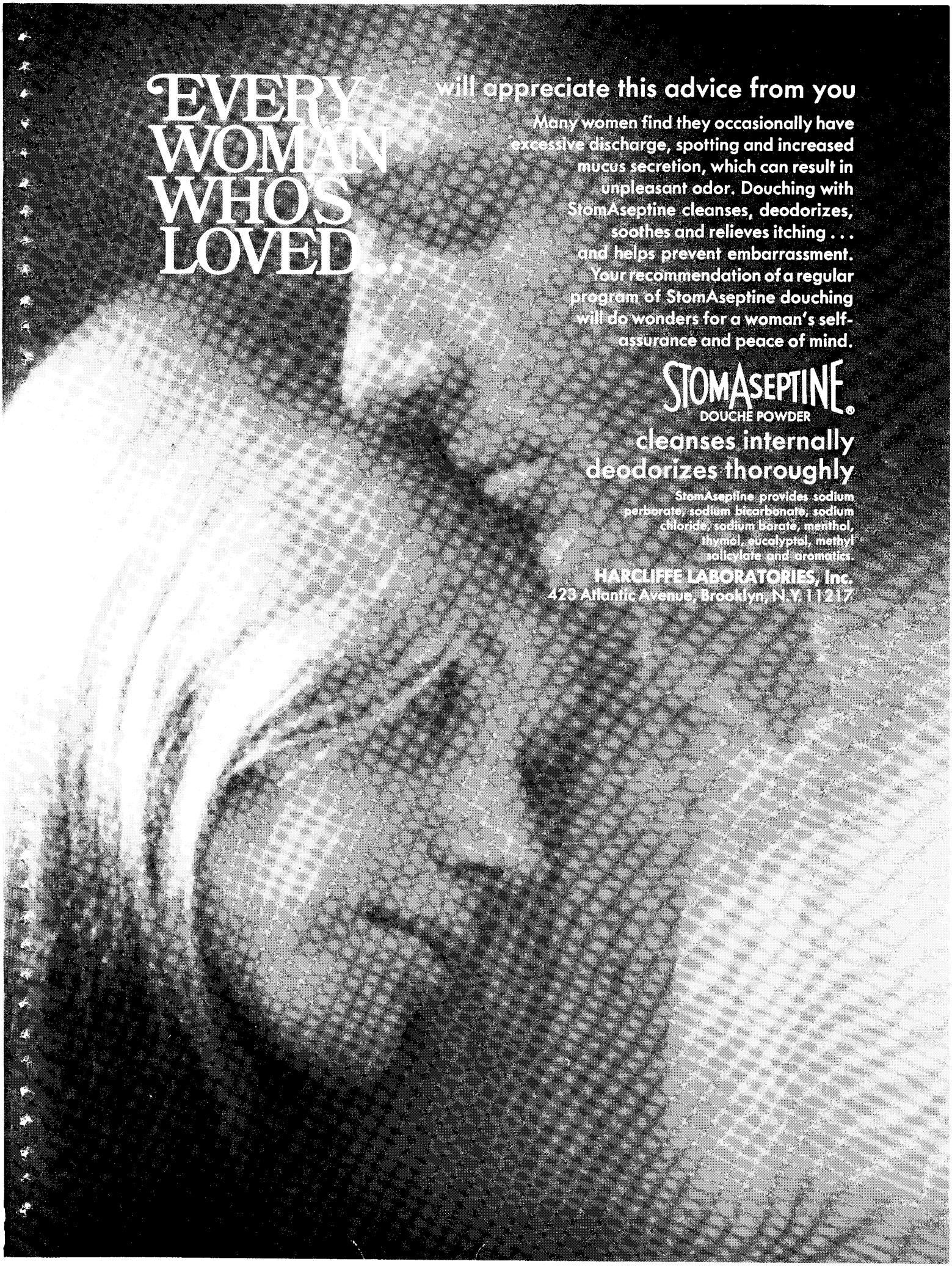
One of the doctor's most important roles is in education.

For his patients, the physician provides the facts, supplies the rationale, triggers the action for life-saving health practices. To his students, he passes on his knowledge and the benefits of his clinical experience. With his colleagues, he shares new information and concepts.

Assisting the doctor in his teaching role is a major function of our professional education program. Through medical conferences, films, exhibits, pamphlets, monographs and other publications, we provide him with the most important and current information on cancer.

If, as Henry Brooks Adams speculated, "A teacher affects eternity; he can never tell where his influence stops", the outlook is optimistic.

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Three clinical studies* confirm the effectiveness of good tasting K-Lyte as a source of supplemental potassium to increase low levels of serum potassium and to maintain normal levels. Patients were on continuous diuretic therapy and salt-restricted diets. K-Lyte dosage was one tablet b.i.d.

Serum Potassium Levels (in mEq./L)

Number of patients	Mean initial value	Mean final value
14	3.23	4.83
16	3.50	4.40
25	4.52	4.47

K-Lyte can offer effective potassium supplementation without the gastrointestinal complications sometimes associated with potassium chloride tablets and thiazide-potassium chloride combination therapy. Effervescent K-Lyte is taken in solution, speeding up absorption to avoid these hazards.

Composition: Each tablet contains potassium bicarbonate (2.5 Gm.), citric acid (2.1 Gm.), cyclamic acid, artificial flavor and color.
Contraindications: When renal function is impaired, or if the patient has Addison's disease, potassium supplementation should not ordinarily be instituted.
Precautions: Should not be used in patients with low urinary output unless under the supervision of a physician. In established hypokalemia, attention should be directed toward correction of frequently associated hypochloremic alkalosis and other potential electrolyte disturbances. Patients should be directed to dissolve tablet in stated amount of water to assure against gastrointestinal injury associated with the oral ingestion of concentrated potassium salt preparations.
Side Effects: While nausea has been reported in an occasional patient, K-Lyte produces no serious side effects when given in recommended doses to patients with normal renal function and urinary output. Potassium intoxication causes listlessness, mental confusion, tingling of the extremities and other symptoms associated with a high concentration of potassium in the serum.
Administration and Dosage: K-Lyte effervescent tablets must be dissolved in 3 to 4 ounces of water before taking. Adults: 1 tablet 2 to 4 times daily, depending on the requirements of the patient. Two tablets (50 mEq. of elemental potassium) supply the approximate normal adult daily requirement.
How Supplied: Effervescent tablets—boxes of 30 and 250 (orange or lime).

*Reports on file: Medical Research Department, Mead Johnson Laboratories, Evansville, Indiana 47721

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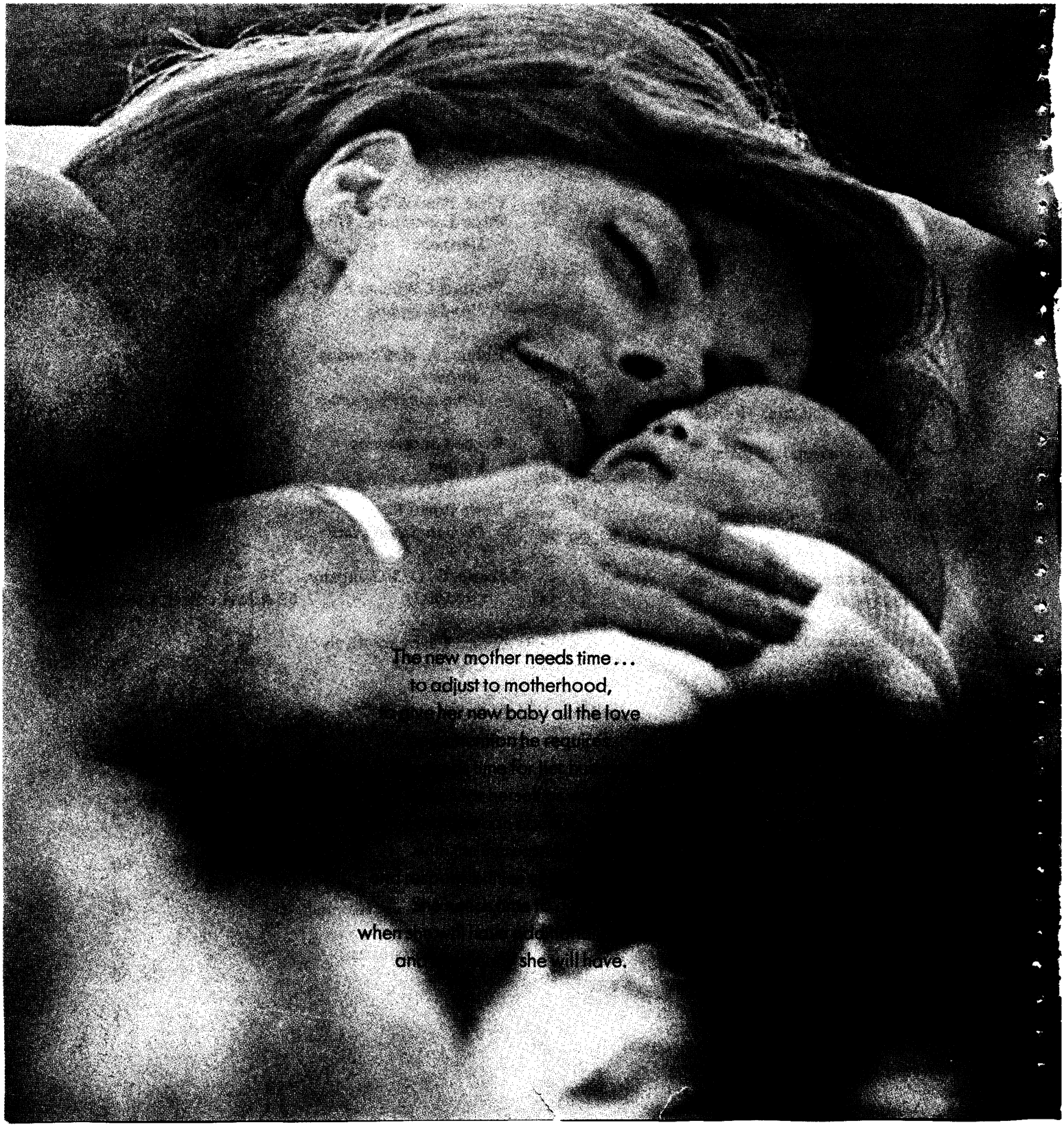
NOW IS THE TIME... TO GIVE HER TIME WITH OVULEN-21®

Each tablet contains ethynodiol diacetate 1 mg., mestranol 0.1 mg.



OVULEN-21®

Each tablet contains ethynodiol diacetate 1 mg., mestranol 0.1 mg.

GIVES HER TIME

Your prescription for Ovulen-21 gives the new mother time to meet her family's present needs...to plan for her family's future.

She can take Ovulen-21 confidently and comfortably month after month. Its dependability is enhanced by its simplicity of use. A woman needs little or no time to learn the simple Ovulen-21 regimen: three weeks on—one week off. And the automatic record-keeping of the petite, virtually "patient-proof" Ovulen-21 Compack® helps to maintain her schedule...helps put time on her side.

Immediately post partum is the time

It is the time when motivation is highest—when a new mother needs expert advice for the future, so she can space her children and limit her family.

It is also the most opportune time, since she is conveniently present in the hospital, for her to be given both instructions and a prescription.

Non-nursing mothers may begin Ovulen-21 immediately after delivery, on the day of departure from the hospital or at the first postpartum visit, as desired. It is recommended that nursing mothers begin Ovulen-21 four weeks after delivery.

A small fraction of the hormonal agents in oral contraceptive pills has been identified in the milk of mothers receiving these drugs. The long-range effect on the nursing infant cannot be determined at this time.

Actions—Ovulen acts to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen depresses the output of both the follicle-stimulating hormone (FSH) and the lutenizing hormone (LH)

Special note: Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen is indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia, and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism, and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis and pulmonary embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates in the United States found relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration, and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable. Retrospective studies in Great Britain have shown a statistically significant association between cerebral thrombosis and embolism and the use of oral contraceptives. This has not been confirmed in the United States.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn.

Since the safety of Ovulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen. Therefore, if such tests are abnormal in a patient taking Ovulen, it is recommended that they be repeated after the drug has been withdrawn for 2 months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: Increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

1. Royal College of General Practitioners: Oral Contraception and Thromboembolic Disease, J. Coll. Gen. Pract. *13*:267-279 (May) 1967.
2. Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Brit. Med. J. 2:193-199 (April 27) 1968.
3. Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, Brit. Med. J. 2:651-657 (June 14) 1969.
4. American Journal of Epidemiology (to be published).

Where "The Pill" Began

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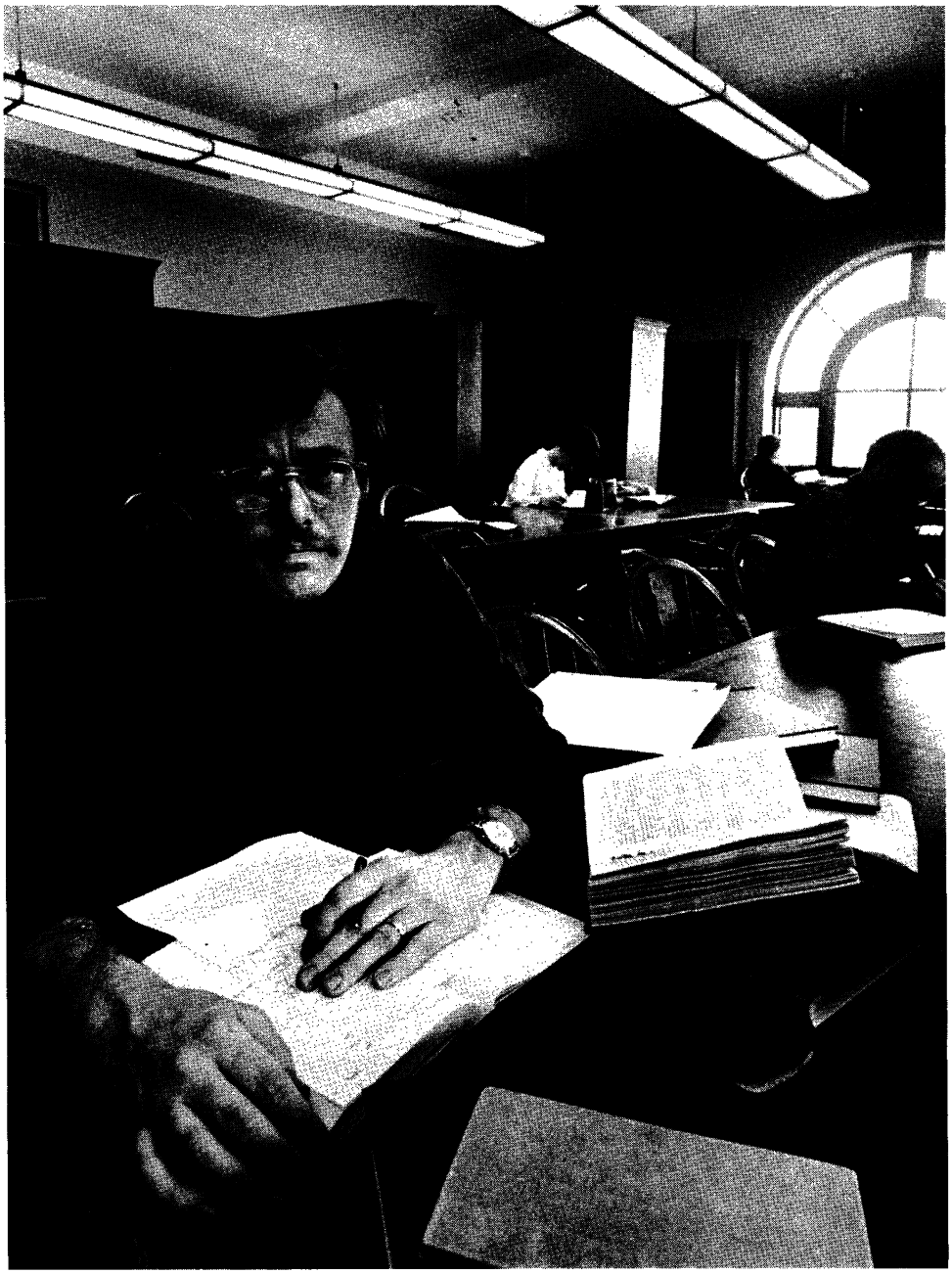

Valium®
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t.i.d. and *h.s.*

for relief of psychic tension and resultant somatic symptoms within the first day for some patients

Before prescribing, please consult complete product information, a summary of which follows:
Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).
Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma.
Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms have occurred following abrupt discontinuance. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.
Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.
Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation, have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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